TPC Summary Report

Project Name: OU 7-10 Staged Interim Action
Stage III Project - Retrieval System Project - Option 2
Project Number: INEEL-RWMC
Project Number: 5974-2 Option 2-R

ESTIMATE ELEMENT	Estimate Subtotal Es		Continaency	<u>TOTAL</u>
		10.45%	51.96%	
Total Estimated Cost (TEC)	\$152,064,402	\$15,887,145 <i>16.08%</i>	\$87,269,705 <i>71.30%</i>	\$255,221,252
Other Project Cost (OPC)	\$6,661,367	\$1,071,148	\$5,513,647	\$1 3,246,1 61
		10.68%	52.81%	
Total Project Cost (TPC)	\$158,725,769	\$16,958,293	\$92,783,352	\$268,467,413
Rounded TPC (Rounded to the nearest \$ 1000000)				\$268,000,000

		Remarks
Type of Estimate:	Proiect Support	
Estimator:	S.N. Waslev/R.D.Adams	
Checked By:	Ja Ja	
Approved By:		



15:46:32

Project Name: OU 7-10 Staged Interim Action
Stage III Project - Retrieval System Project - Option 2
Project Location: INEEL-RWMC
Estimate Number: 5974-2 Option 2-R

Client: S. L. Austad

Prepared By: S.N. Wasley/R.D.Adams Estimate Type: **Project Support**

<u>l evel</u> 1.0	<u>Description</u> ESH&Q	Estimate Subtotal \$12,550,761	Escalation \$1,017,867	Continuency \$5,808,979	Continuency% 42.81%	<u>TOTAL</u> \$19,377,607
1.01	ENVIRONMENTAL	\$6,089,836	\$493,886	\$2,818,612	42.81%	\$9,402,334
1.02	SAFETY ANALYSIS	\$ 987,541	\$80,090	\$457,072	42.81%	\$1,524,703
1.03	SAFETY & HEALTH	\$1,771,765	\$143,690	\$820,041	42.81%	\$2,735,496
1.04	FIRE PROTECTION	\$145,227	\$11,778	\$67,217	42.81%	\$224,221
1.05	RADIOLOGICAL CONTROLS	\$532,498	\$43,186	\$246,461	42.81%	\$822,144
1.01	EMERGENCY PLANNING	\$19,364	\$1,570	\$8,962	42.81%	\$29,896
1.08	-SAFEGUARDS& SECURITY	\$100,000	\$8,110	\$46,284	42.81%	\$1 54 ,394
1.09	QUALITY	\$2,904,532	\$235,558	\$1,344,330	42.81%	\$4,484,420
2.0	DESIGN ENGINEERING	\$19,363,548	\$1,197,829	\$13,641,191	66.34%	\$34,202,568
2.01	CONCEPTUAL DESIGN	\$3,872,710	\$100,690	\$2,636,103	66.34%	\$6,609,503
2.02	PRELIMINARY DESIGN	\$5,809,064	\$311,947	\$4,060,909	66.34%	\$10,181,920
2.03	FINAL DESIGN	\$9,681,774	\$785,192	\$6,944,179	66.34%	\$17,411,145
3.0	PROCUREMENT	\$40,929,933	\$3,319,418	\$24,506,121	55.38%	\$68,755,472
3.1	PROCUREMENTMANAGEMENT	\$1,568,447	\$127,201	\$939,082	55.38%	\$2,634,730
3.2	-PROCUREMENT EQUIPMENT	\$33,769,291	\$2,738,689	\$20,218,805	55.38%	\$56,726,786
3.2.01	—RETRIEVAL EQUIPMENT	\$5,893,600	\$411,911	\$3,528,696	55.38%	\$9,900,261
3.2.02	WASH BAY EQUIPMENT	\$258,322	\$20,950	\$154,666	55.38%	\$433,938
3.2.04	MSB/GLOVEBOX EQUIPMENT	\$131,800	\$11,116	\$82,505	55.38%	\$231,481
3.2.05	FABRIC STRUCTURES-PROCUREMENT	\$2,596,046	\$210,539	\$1,554,340	55.38%	\$4,360,925
3.2.06	-LINER PANEL-PROCUREMENT	\$21,526,418	\$1,145,793	\$12,888,581	55.38%	\$36,160,198
3.2.07	—PLANTAIR COMPRESSOR-PROCUREMENT	\$28,620	\$2,321	\$11,136	55.38%	\$48,077
3.2.08	RADIOLOGICAL/CRITICALITY MONITORING EQUIPPROCUREMENT	\$132,240	\$59,385	\$438,421	55.38%	\$1,230,055
3.2.10	HVAC EQUIPMENT-PROCUREMENT	\$2,301,058	\$186,616	\$1,311,120	55.38%	\$3,865,394

Project Name: OU 7-10 Staged Interim Action
Stage III Project - Retrieval System Project - Option 2
Project Location: INEEL-RWMC
Estimate Number: 5974-2 Option 2-R

S. L. Austad Client: Prepared By: S.N. Wasley/R.D.Adams

Estimate Type: Project Support

<u>Level</u> 3.2.11	Description	Estimate Subtotal \$295,179	<u>Escalation</u> \$23,939	Continaency \$176,734	Continaencv % 55.38%	TOTAL \$495,852
3.3	BBWI MATERIAL HANDLING FEE	\$5,592,195	\$453,527	\$3,348,234	55.38%	\$9,393,956
4.0	CONSTRUCTION	\$70,506,563	\$9,419,677	\$39,183,728	49.02%	\$119,109,967
4.1	CONSTRUCTION MANAGEMENT	\$6,777,242	\$905,440	\$3,766,408	49.02%	\$1 1 ,449,089
4.2	CONSTRUCTION SUBCONTRACTS	\$63,729,321	\$8,514,237	\$35,417,320	49.02%	\$107,660,878
4.2.01	—GENERAL CONDITIONS	\$13,275,616	\$1,773,622	\$7,378,129	49.03%	\$22,427,367
4.2.02	SITEWORK	\$996,023	\$133,069	\$553,526	49.02%	\$1,682,618
4.2.02.01	RELOCATE BERM 8 DRAINAGE	\$289,307	\$38,651	\$160,778	49.02%	\$488,737
4.2.02.01.01	SITEWORK	\$229,289	\$30,633	\$127,424	49.02%	\$387,346
4.2.02.01.01.01	Demo Lift Station Concrete	\$33,201	\$4,436	\$18,451	49.02%	\$56,088
4.2.02.01.01.02	Demo Lift Station Electrical	\$6,922	\$925	\$3.847	49.02%	\$11,693
4.2.02.01.01.03	Demo Fire Pipe in Berm	\$8,300	\$1,109	\$4,613	49.02%	\$14,022
4.2.02.01.01.04	Excavate New Basin	\$19,878	\$2,656	\$11,047	49.02%	\$33.580
4.2.02.01.01.05	Relocate North Berm	\$151,773	\$20,277	\$84,346	49.02%	\$256,396
4.2.02.01.01.06	Ex & Backfill Discharge Pipe	\$9,214	\$1,231	\$5,121	49.02%	\$15,566
4.2.02.01.02	CONCRETE	\$24,543	\$3,279	\$13,639	49.02%	\$41,461
4.2.02.01.02.01	Concrete Lift Station	\$20,648	\$2,759	\$11,475	49.02%	\$34,881
4.2.02.01.02.02	Ductbank Concrete	\$3,895	\$520	\$2,165	49.02%	\$6.580
4.2.02.01.05	METALS	\$5,903	\$789	\$3.281	49.02%	\$9,972
4.2.02.0.15	MECHANICAL	\$22,175	\$2,963	\$12,324	49.02%	\$37,462
4.2.02.01.16	ELECTRICAL	\$7,397	\$988	\$4,111	49.02%	\$12,496
4.2.02.01.16.01	Switchgear & Transformers	\$970	\$130	\$539	49.02%	\$1,638
4.2.02.01.16.02	Raceways & Fittings	\$3,015	\$403	\$1,676	49.02%	\$5,094
4.2.02.01.16.03	Conductors 8 Grounding	\$1,818	\$243	\$1,010	49.02%	\$3.071
4.2.02.01.16.04	Testing	\$1,595	\$213	\$886	49.02%	\$2,694
4.2.02.02	- —EARTHWORK	\$484.771	\$64,765	\$269,405	49.02%	\$818,942

Project Name: OU 7-10 Staged Interim Action
Stage III Project * Retrieval System Project * Option 2
Project Location: INEEL-RWMC
Estimate Number: 5974-2 Option 2-R

S. L. Austad Client:

Prepared By: S.N. Wasley/R.D.Adams Estimate Type: **Project Support**

Level 4.2.02.02.01	DescriptionRFS EARTHWORK	Estimate Subtotal \$438,301	Escalation \$58,557	Continaency \$243,580	Continaencv % 49.02%	TOTAL \$740,437
4.2.02.02.02	WASH BAY EARTHWORK	\$4,480	\$599	\$2,490	49.02%	\$7.569
4.2.02.02.04	MAIN SUPPORT BUILDING EARTHWORK	\$18,118	\$2,421	\$10,069	49.02%	\$30,607
4.2.02.02.07	CHARACTERIZATIONAIRLOCK EARTHWORK	\$23.872	\$3,189	\$13,267	49.02%	\$40,328
4.2.02.03	ROADWAYS8 PAVING	\$221,945	\$29,652	\$123.343	49.02%	\$374,939
4.2.03	—CONCRETE	\$2,138,866	\$285,752	\$1,188,695	49.03%	\$3,613,313
4.2.03.01	RFS CONCRETE	\$1,494,709	\$199,693	\$830,699	49.03%	\$2,525,101
4.2.03.02	WASH BAY CONCRETE	\$26,077	\$3,484	\$14,493	49.03%	\$44,053
4.2.03.04	MAIN SUPPORT BUILDING CONCRETE	\$529,862	\$70,790	\$294,476	49.03%	\$895,127
4.2.03.07	—-CHARACTERIZATION AIRLOCK CONCRETE	\$88.218	\$11,786	\$49.028	49.03%	\$149,032
4.2.05	METALS	\$9,878,020	\$1,319,704	\$5,489,524	49.02%	\$16,687,248
4.2.05.01	RFS METALS	\$7,078,280	\$945,658	\$3,933,621	49.02%	\$11,957,560
4.2.05.01.01	RFS STRUCTURAL STEEL	\$5,962,705	\$796,617	\$3,313,661	49.02%	\$10,072,983
4.2.05.01.02	RFS MISC. METALS	\$1,115,575	\$149,041	\$619,960	49.02%	\$1,884,576
4.2.05.02	WASH BAY METALS	\$322,626	\$43,103	\$179,293	49.02%	\$545,021
4.2.05.03	CLEANTRANSFER AIRLOCK METALS	\$119,192	\$15,924	\$66,238	49.02%	\$201,354
4.2.05.04	MAIN SUPPORT BUILDING METALS	\$448,870	\$59,969	\$249,451	49.02%	\$758,290
4.2.05.05	HVAC ROOM METALS	\$1,084,509	\$144,890	\$602,695	49.02%	\$1,832,095
4.2.05.06	PERSONNELAIRLOCK METALS	\$138,785	\$18,542	\$77,127	49.02%	\$234,453
4.2.05.07	CHARACTERIZATIONAIRLOCK METALS	\$685.760	\$91,618	\$381.098	49.02%	\$1,158,476
4.2.08	DOORS a WINDOWS	\$1,011,538	\$135,141	\$562,201	49.03%	\$1,708,881
4.2.08.01	RFS DOORS 8 WINDOWS	\$200,576	\$26.797	\$111,478	49.03%	\$338.850
4.2.08.04	MAIN SUPPORT BLDG. DOORS 8 WINDOWS	\$310,962	\$41,545	\$172.829	49.03%	\$525,336
4.2.08.10	SPECIALTY DOORS	\$500,000	\$66,800	\$277.894	49.03%	\$844,694
4.2.09	—FINISHES	\$784,799	\$1 04,849	\$436,148	49.02%	\$1,325,796
4.2.09.04	MAIN SUPPORT BUILDING FINISHES	\$186.155	\$24,870	\$103,455	49.02%	\$314,481

OU 7-10 Staged Interim Action Project Name:

Stage III Project - Retrieval System Project - Option 2
Project Location: INEEL-RWMC

Estimate Number: 5974-2 Option 2-R

Client: S. L. Austad Prepared By: S.N. Wasley/R.D.Adams

Estimate Type: Project Support

Level 4.2.09.10	DescriptionSTRIPPABLE COATINGS	Estimate Subtotal \$598,644	Escalation \$79,979	Continaency \$332,693	Continaencv% 49.02%	TOTAL \$1,011,315
4.2.11	EQUIPMENT	\$12,815	\$1,712	\$7,122	49.02%	\$21,648
4.2.1 1.01	WASH BAY EQUIPMENT	\$12,815	\$1,712	\$7,122	49.02%	\$21,648
4.2.13	SPECIAL CONSTRUCTION	\$13,151,223	\$1,757,003	\$7,308,666	49.02%	\$22,216,892
4.2.13.01	FACILITY MOCK-UP	\$2,606,000	\$348.162	\$1,448,259	49.02%	\$4,402,421
4.2.13.02	STRUCTURE ERECTIONS	\$10,545,223	\$1,408,842	\$5,860,406	49.02%	\$17,814,471
4.2.13.02.01	ERECT FABRIC STRUCTURES	\$3,742,316	\$499,973	\$2,079,756	49.02%	\$6,322,046
4.2.13.02.02	ERECT LINER PANELS	\$6,802,907	\$908,868	\$3,780,650	49.02%	\$11,492,425
4.2.14	CONVEYING SYSTEMS	\$11,309	\$1,511	\$6,285	49.03%	\$19,105
4.2.14.04	MAIN SUPPORT BLDG. CONVEYING SYSTEMS	\$11,309	\$1,511	\$6,285	49.03%	\$19.105
4.2.15	—MECHANICAL	\$11,059,020	\$1,477,485	\$6,146,014	49.02%	\$18,682,519
4.2.15.01	HVAC	\$6,709,354	\$896,370	\$3,728,701	49.02%	\$11,334,425
4.2.15.01.01	HVAC - DUCTWORK	\$5,580,778	\$745,592	\$3,101,499	49.02%	\$9,427,869
4.2.15.01.02	EXHAUST STACK	\$258,292	\$34,508	\$143.545	49.02%	\$436,345
4.2.15.01.03	EMISSIONSNOC MONITORIONG	\$278.600	\$37,221	\$154,831	49.02%	\$470,652
4.2.15.01.04	HVAC - EQUIPMENT	\$179,575	\$23,991	\$99,798	49.02%	\$303,365
4.2.15.01.05	CHILLER PIPING& EQUIPMENT	\$412,108	\$55.058	\$229,028	49.02%	\$696,193
4.2.15.02	FIRE PROTECTION	\$2,150,986	\$287,372	\$1,195,403	49.02%	\$3,633,760
4.2.15.02.01	RPS FIRE SYSTEM CONTROLS	\$558.960	\$74,677	\$310,640	49.02%	\$944,277
4.2.15.02.02	RFS DRY PIPE FIRE PROTECTION	\$808,050	\$107,955	\$449,071	49.02%	\$1,365,077
4.2.15.02.04	RFSEXTRAHAZARDFOAMSYSTEM	\$591,500	\$79,024	\$328,724	49.02%	\$999,249
4.2.15.02.05	MAIN SUPPORT BUILDING DRY PIPE SYSTEM	\$116,880	\$15,615	\$64,956	49.02%	\$197,451
4.2.15.02.06	ADDITIONAL MAIN SUPPORT BUILDING FIRE PROTECTION SYSTEMS	\$44,936	\$6,003	\$24,973	49.02%	\$75,912
4.2.15.02.07	AIRLOCK TO CHARACTERIZATION FIRE PROTECTION	N \$30,660	\$4,096	\$17,039	49.02%	\$51,795
4.2.15.03	PLANT AIR	\$322,728	\$43,116	\$179,355	49.02%	\$545,199
4.2.15.04	BREATHING AIR	\$619,696	\$82,791	\$344,394	49.02%	\$1,046,881

Project Name: OU 7-10 Staged Interim Action
Stage III Project - Retrieval System Project - Option 2
Project Location: INEEL-RWMC

Estimate Number: 5974-2 Option 2-R

S. L. Austad Client:

Prepared By: S.N. Wasley/R.D.Adams Estimate Type: Project Support

Level 4.2.15.05	DescriDtionDUST SUPPRESSION	Estimate Subtotal \$276,726	Escalation \$36,971	Contingency \$153,790	Continaencv % 49.02%	TOTAL \$467.486
4.2.15.06	MISC. MECHANICAL	\$979,530	\$130,865	\$544,371	49.02%	\$1,654,767
4.2.16	—ELECTRICAL	\$11,410,093	\$1,524,388	\$6,341,010	49.02%	\$19,275,491
4.2.16.01	GENERAL FACILITIES ELECTRICAL	\$5,941,992	\$793,850	\$3,302,184	49.02%	\$10,038,027
4.2.16.02	ELECTRICAL SWITCH GEAR & PANEL BOARDS	\$437.998	\$58,516	\$243,411	49.02%	\$739,925
4.2.16.02.01	MAIN FEED CONDUITS AND CONDUCTORS	\$75,732	\$10,118	\$42,087	49.02%	\$127,936
4.2.16.02.02	TRANSFORMERS	\$79,734	\$10,652	\$44.311	49.02%	\$134,698
4.2.16.02.03	SITEWORK	\$29,621	\$3,957	\$16,461	49.02%	\$50,040
4.2.16.02.04	SWITCHGEAR	\$233,022	\$31,132	\$129,499	49.02%	\$393,652
4.2.16.02.05	MISC. CONNECTIONS	\$7,132	\$953	\$3.963	49.02%	\$12,048
4.2.16.02.06	TESTING	\$12,757	\$1,704	\$7,090	49.02%	\$21,551
4.2.16.03	MONITORING AND CONTROLS	\$1,400,070	\$187.049	\$778.071	49.02%	\$2,365,190
4.2.16.04	——CRITICALITY & RAD MONITORING SYSTEMS INSTALLATION	\$76,904	\$10,274	\$42.738	49.02%	\$129.917
4.2.16.05	CCTV MONITORING SYSTEM	\$215,152	\$28,744	\$119,568	49.02%	\$363,464
4.2.16.06	INTEGRATION CONTROLS SYSTEM	\$3,337,977	\$445,954	\$1,855,037	49.02%	\$5,638,968
6.0	TESTING & TURNOVER	\$6,661,367	\$1,071,148	\$5,513,647	71.30%	\$13,246,161
OPC3100	TESTING AND TURNOVER PLANNING	\$193,635	\$31,137	\$160,273	71.30%	\$385,045
OPC3200	S. O. TESTING	\$2,904,532	\$467,049	\$2,404,096	71.30%	\$5,775,677
OPC3300	ORR SUPPORT	\$212,999	\$34,250	\$176,300	71.30%	\$423,550
OPC3400	FACILITY ACCEPTANCE REVIEW	\$145,227	\$23,352	\$120,205	71.30%	\$288,784
OPC3500	RADIOLOGICAL CONTROL SUPPORT	\$106,500	\$17,125	\$88,150	71.30%	\$211,775
OPC3600	OPERATOR TRAINING	\$1,936,355	\$311,366	\$1,602,731	71.30%	\$3,850,451
OPC3700	OPERATING PROCEDURES	\$425,998	\$68,500	\$352,601	71.30%	\$847,099
OPC3800	START-UP COORDINATION	\$125,863	\$20,239	\$104,177	71.30%	\$250,279
OPC3900	-SPARES	\$610,258	\$98,129	\$505,113	71.30%	\$1,213,501

Project Name: OU 7-10 Staged Interim Action
Stage III Project - Retrieval System Project - Option 2
Project Location: INEEL-RWMC
Estimate Number: 5974-2 Option 2-R

S. L. Austad Client:

Prepared By: S.N. Wasley/R.D.Adams

<u>Level</u>	<u>DescriDtion</u>	Estimate Subtotal	Escalation	Continaency	Continaencv %	<u>TOTAL</u>
7.0	PROJECT MANAGEMENT	\$8,713,597	\$932,355	\$4,129,686	42.81%	\$13,775,637
Total OU 7-10 ST OPTION # 2	AGE III - RETRIEVAL SYSTEM PROJECT -	\$158,725,769	\$16,958,293	\$92,783,352	52.81%	\$268,467,413

Project Name: OU 7-70 Staged Interim Action
Stage III Project - Retrieval System Project - Option 2
Project Location: INEEL-RWIC

Estimate Number: 5974-2 Option 2-R

S. L. Austad Client:

Prepared By: S.N. Wasley/R.D.Adams

Estimate Type: **Project Support**

Code Description Contracto	r <u>Qtv</u> UOM	Hrs Resour	rce <u>Labor</u> <u>Eau</u>	<u>lipment</u> Ma	aterial <u>Subc</u>	ontractor	<u>Other</u>	TOTAL
<u>OL ENVIRONMENTAL</u>								
	l procurement costs based on detailed input fro presentative percentage of total construction a							
ENVIRONMENTAL	U.C. per\$ 96,817,74100 \$	0	0 \$0	<i>0</i> \$0	0 \$0	0 \$0 \$	0.063 66,089,836	0.063 \$6,089,8 3
Subtotal Sales Tax INEEL/Subcontractor Overheads	0.00%		<i>\$0</i> \$0 <i>\$0</i>	\$0 \$0 \$0	\$0 \$0 \$0	\$0 \$ \$0 \$0	\$6,089,836 \$0 \$0	\$6,089,83 <i>\$0</i> \$0
Subtotal Estimate Escalation Contingency	0.00%		\$0 \$0	\$0 \$0	\$0 \$0	\$0	\$493,886 32,818,612	\$6,089,83 \$493,88 \$2,818,61
Total 1.01 ENVIRONMENTAL		0	\$0	\$0	\$0	\$ 0 \$	9,402,334	\$9,402,33
02 SAFETY ANALYSIS Temo: Percentage of construction and	l procurement costs based on detailed input fro	om the project team for t	he LCBe ffort, OU 7-101	PIT-9 STAGE III • L	.CB, estimate# 59	74-1. Detailed in	nput was	
	presentative percentage of total construction a							
SAFETY ANALYSIS	U.C. per\$ 96,817,741 00 \$	0	0 \$0	0 <i>\$</i> 0	0 \$0	0 \$0	0.01 \$987,541	0.01 \$987,541
Subtotal Sales Tax INEEL/Subcontractor Overheads	0.00%		\$0 \$0 \$0	\$0 \$0 \$0	\$0 \$0 <i>\$0</i>	\$0 \$0 \$0	\$987,541 \$0 <i>\$0</i>	\$987,541 \$0 \$0
Subtotal Estimate Escalation Contingency			\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$80,090 \$457,072	\$987,541 \$80,09 5457,07

\$1,524,703

\$1,524,703

\$0

\$0

\$0

0

---Total 1.02SAFETY ANALYSIS

Project Name:

OU 7-10Staged Interim Action
Stage III Project • Retrieval System Project • Option 2

Project Location: |NEEL-RWMC Estimate Number: 5974-2 Option 2-R

S. L. Austad Client:

Code Description Contractor	Qtv_	UOM Hrs R	esource Labor	Eauipment <u>M</u>	laterial Subc	ontractor	<u>Other</u>	TOTAL
1.03 SAFETY & HEALTH								
	procurement costs based on detailed presentative percentage of total const							
SAFETY & HEALTH	<i>U.C. per \$</i> 96,817,741.00	\$ 0	o \$0	o \$0	o \$0	0 \$0 \$	0.018 1,771,765	0.018 \$1,771,765
Subtotal Sales Tax INEEL/Subcontractor Overheads	0.00%		\$0 \$0 \$0	\$0 \$0 \$0	\$0 \$0 \$0	\$0 \$1 \$0 \$0	1,771,765 \$0 <i>\$0</i>	\$1,771,765 \$0 \$0
Subtotal Estimate Escalation Contingency			\$0 \$0	\$0 \$0	\$0 \$0		\$143,690 \$820,041	\$1,771,765 \$143,690 \$820,041
— Total 1.03 SAFETY & HEALTH		0	\$0	\$0	\$0	\$0 \$2	2,735,496	\$2,735,496
	procurement costs based on detailed bresentative percentage of total const							
FIRE PROTECTION	<i>U.C. per</i> \$ 96,817,741.00	·	o \$0	0 \$0	0 \$0	0	0.001 \$145,227	0.001 \$145,227
Subtotal Sales Tax INEEUSubcontractorOverheads	0.00%		\$0 \$0 \$0	\$0 \$0 \$0	\$0 \$0 \$0	\$0 \$0 \$0	\$145,227 \$0 <i>\$0</i>	\$145,227 \$0 \$0
Subtotal Estimate Escalation Contingency			\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$11,770 \$67,217	\$145,227 \$11,778 \$67,217
Total 1.04 FIRE PROTECTION		0	\$0	\$0	\$0	\$0	\$224,221	\$224,221

Project Name: OU 7-70 Staged Interim Action

Stage III Project - Retrieval System Project - Option 2

Project Location: INEEL-RWMC Estimate Number: 5974-2 Option 2-R

S. L. Austad Client:

Prepared By: S.N. Wasley/R.D.Adams

Estimate Type: Project Support

Code Description	Contractor	_Qtv	<u>UOM</u>	Hrs	Resource	<u>Labor</u>	<u>Eauipment</u>	Material Su	ubcontractor	<u>Other</u>	TOT L
1.05 RADIOLOGICAL CONTR	<u>ol</u> s										
		ment costs based on detail tive percentage of total col									
RADIOLOGICAL CONTI	ROLS	U.C. per \$ 96,817,741.00) \$	0		° \$0	° \$0	0 \$0	0 \$0	0.006 \$532,498	\$53 2) 498
Subtotal Sales Tax INEEUSubcontractorOverhe	eads	0.00%				\$0 \$0 \$0	\$0 \$0 \$0	\$0 \$0 \$0	\$0 \$0 \$0	\$532,498 \$0 \$0	\$532,498 \$0 \$0
Subtotal Estimate Escalation Contingency						\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$43,186 \$246,461	\$532,498 \$43,186 \$246,461
Total 1.05 RADIOLOGICAL	CONTROLS			0		\$0	\$0	\$0	\$0	\$822,144	\$822,144
1.07 EMERGENCY PLANNING	3										

Percentage of construction and procurement costs based on detailed input from the project team for the LCE effort, **OU** 7-10PIT-9 STAGEIII - LCE. estimate # 5974-1. Detailed input was back-calculated to arrive at a representative percentage of total construction and procurement costs. That percentage was applied to this estimated construction and procurement costs. Memo:

EMERGENCY PLANNING	U.C. per \$ 96,817,741.00 \$	0	o \$0	0 \$0	0 \$0	° \$0	° \$19,364	\$19,364
Subtotal Sales Tax INEEUSubcontractorOverheads	0.00%		\$0 \$0 \$ <i>0</i>	\$0 \$0 \$0	\$0 \$0 \$0	\$0 \$0 \$0	\$19,364 \$0 \$0	\$19,364 \$0 \$0
Subtotal Estimate Escalation Contingency			\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$1,570 \$8.962	\$19,364 \$1,570 \$8,962
Total 1.07 EMERGENCY PLANNING		0	\$0	\$0	\$0	\$0	\$29,896	\$29,896

Project Name: **OU 7-70 Staged Interim Action**

Stage III Project - Retrieval System Project - Option 2

Project Location: INEEL-RWMC Estimate Number: 5974-2 Option 2-R Client:

S. L. Austad

Prepared By: S.N. Wasley/R.D.Adams

Estimate Type: Project Support

Code Description	Contractor	_Qtv	<u>UOM</u>	<u>Hrs</u>	Resource	<u>Labor</u>	Equipment	Material S	<u>Subcontractor</u>	<u>Other</u>	TOTAL
1.08 SAFEGUARDS & SECURI	<u>TY</u>										
	onstruction and procure to arrive at a representa										
SAFEGUARDS & SECUI Memo: Per Dave Wilkins.	RITY	U.C.per LS	1.00 LS	0		0 \$0	° \$0	o \$0	o \$0	100000 \$100,000	100000 \$100,000
Subtotal Sales Tax INEEUSubcontractor Overhea	ads	0.00%				\$0 \$0 \$0	\$0 \$0 \$0	\$0 \$0 \$ 0	\$0 \$0 \$0	\$100,000 \$0 \$0	\$100,000 \$0 \$0
Subtotal Estimate Escalation Contingency						\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$8,110 \$46,284	\$100,000 \$8,110 \$46,284
Total 1.08 SAFEGUARDS &	SECURITY			0		\$0	\$0	\$0	\$0	\$154,394	\$154,394
1.09 QUALITY											

1.09 QUALITY

Memo:

Percentage of construction and procurement costs based on detailed input from the project team for the LCB effort, OU 7-10 PIT-9 STAGEIII • LCB, estimate # 5974-1. Also considered were percentage allowances derived by the project team on the CSiX/TRU Grout Feasibility Study, produced by Washington Group International, December, 2000. Where large discrepencies occurred, an average of the two percentages was applied here.

QUALITY	U.C. per\$ 96,817,74100 \$	0	o \$0	0 \$0	° \$0	0 \$0	0.03 \$2,904,532	0.03 \$2,904,532
Subtotal Sales Tax INEEUSubcontractor Overheads	0.00%		\$0 \$0 \$0	\$0 \$0 \$0	\$0 \$0 \$0	\$0 \$0 \$0	\$2,904,532 \$0 \$0	\$2,904,532 \$0 \$0
Subtotal Estimate Escalation Continaencv			\$0 \$ 0	\$0 \$0	\$0 \$0	\$0 \$0	\$235,558 \$1.344.330	\$2,904,532 \$235,558 \$1.344.330
Total 1.09 QUALITY		0	\$0	\$0	\$0	\$0	\$4,484,420	\$4,484,420

OU 7-10 Staged Interim Action Project Name:

Stage III Project - Retrieval System Project - Option 2

Project Location: INEEL-RWMC EstimateNumber: 5974-2 Option 2-R Client: S. L. Austad

PreparedBy: S.N. Wasley/R.D.Adams

Estimate Type: **Project Support**

Code <u>C</u>	<u>Description</u>	Contractor	<u>Qtv</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Eauiument</u>	<u>Material</u>	Subcontractor	<u>Other</u>	<u>TOTAL</u>
2.01 CON	CEPTUAL DESIGN											
Memo:	percentage allowa		ent costs based on detailed ect team on the CSiX/TRU es was applied here.									
			U.C. per\$				0	0		0 0.04	0	0.04
CO	NCEPTUAL DESIGN I	EFFORT	96,817,74100	\$	0		\$0	\$0	\$	\$3,872,710	\$0	\$3,872,710
Subtota							\$0	\$0	\$	\$3,872,710	\$0	\$3,872,710
Sales Ta	ax						\$0	\$0	\$	so <i>\$0</i>	<i>\$</i> 0	\$0
INEEL/S	ubcontractor Overhead	ds	0.00%				\$0	\$0	\$	\$0 \$0	\$0	\$0
Subtota	al Estimate											\$3,872,710
Escalati	on						\$0	<i>\$</i> 0	\$	\$100,690	\$0	\$100,690
Continge	ency						\$0	\$0	\$	\$2,636,103	\$0	\$2,636,103
Total 2.	.01 CONCEPTUAL DE	SIGN			0	·	\$0	\$0	Ş	\$6,609,503	\$0	\$6,609,503

2.02 PRELIMINARY DESIGN

Memo:

Percentage of construction and procurement costs based on detailed input from the project team for the LCB effort, OU 7-10PIT-9 STAGEIII - LCB, estimate # 5974-1. Also considered were percentage allowances derived by the project team on the CSIXTRU Grout Feasibility Study, produced by Washington Group International, December, 2000. Where large discrepencies occurred, an average of the two percentages was applied here.

PRELIMINARY DESIGN	<i>U.C. per\$</i> 96,817,74100 \$	0	o \$0	0 \$0	0 \$ 0	0.06 \$5,809,064	0 \$0	0.06 \$5,809,064
Subtotal			\$0	\$0	\$0	\$5,809,064	\$0	\$5,809,064
Sales Tax			<i>\$</i> 0	<i>\$</i> 0	\$0	<i>\$</i> 0	<i>\$</i> 0	\$0
INEEL/Subcontractor Overheads	0.00%		<i>\$</i> 0	\$0	<i>\$</i> 0	\$0	<i>\$</i> 0	\$0
Subtotal Estimate								55,809,064
Escalation			\$0	\$0	\$0	\$311,947	\$0	\$31 1,947
Contingency			\$0	\$0	\$0	\$4,060,909	\$0	\$4,060,909
-Total 2.02 PRELIMINARY DESIGN		0	\$0	\$0	\$0	\$10,181,920	\$0	\$10,181,920

Project Name: OU 7-10 Staged Interim Action
Stage III Project - Retrieval System Project - Option 2
Project Location: INEEL-RWMC
Estimate Number: 5974-2 Option 2-R

S. L. Austad Client:

Code Description	Contractor	Qtv	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>EauiDment</u>	<u>Material</u>	Subcontractor	<u>Other</u>	TOTAL
2.03 FINAL DESIGN											
percentage allowan	truction and procurement cost ces derived by the project tean e of the two percentages was a	n on the CSIX/TRU									
FINAL DESIGN	U.C. į	per\$ 96,817,741.00	\$	0		o \$0	o \$0	\$	o <i>o</i> \$0 \$0	0.1 \$9,681,774	0.1 \$9,681,774
Subtotal Sales Tax INEEL/Subcontractor Overheads	0.00	%				\$0 \$0 \$0	\$0 \$0 \$0	\$	\$0 \$0 \$0 \$0 \$0 \$0	\$9,681,774 \$0 \$0	\$9,681,774 \$0 <i>\$0</i>
Subtotal Estimate Escalation Continaencv						\$0 \$0	\$0 \$0		\$0 \$0 \$0 \$0	\$785,192 \$6,944,179	\$9,681,774 \$785,192 \$6,944,179
—Total 2.03 FINAL DESIGN				0		\$0	\$0	\$	\$0 \$0	\$17,411,145	\$17,411,145
3.1 PROCUREMENT MANAGEME	<u>NT</u>										
PROCUREMENT SUPPORT	U.C. _F	per\$ 96,817,741.00	\$	0		0 \$0	o \$0		0 0 \$0 \$0	0.016 \$1,568,447	<i>0.016</i> \$1,568,447
Subtotal Sales Tax INEEUSubcontractorOverheads	0.009	%				\$0 \$0 \$0	\$0 \$0 \$0	\$	\$0 \$0 \$0 \$0 \$0 \$0	\$1,568,447 \$0 \$ 0	\$1,568,447 \$0 \$0
Subtotal Estimate Escalation Contingency						\$0 \$0	\$0 \$0		50 \$0 \$0 \$0	\$127,201 \$939,082	\$1,568,447 \$127,201 \$939,082
—Total 3.1 PROCUREMENTMAN	NAGEMENT			0		\$0	\$0		50 \$0	\$2,634,730	\$2,634,730

Project Name: OU 7-70 Staged Interim Action
Stage III Project - Retrieval System Project - Option 2
Project Location: INEEL-RWMC

Estimate Number: 5974-2 Option 2-R

Client: S. L. Austad

Code Description	Contractor	<u>Qtv</u>	UOM	<u>Hrs</u>	Resource Labo	<u> r</u>	<u>Eauipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	TOTAL
3.2.01 RETRIEVAL EQUIPMENT	[
Memo: Equipment costs	were provided by the BBWI Enginee	rnggroup, est	imatefile c	ontaines the	se sheets with notes a	nd bas	sis of costs.				
BH-1,2 BACKHOE Memo:	U.C. per l		EA	0		0 \$0	o \$0	<i>53500</i> 0 \$1,070,000		0 \$0	<i>535000</i> 51,070,000
FEL-I,2 LOADER/FORKLIFT	U.C. per I		EA	0		o \$0	0 \$0	710000 \$1,420,00		0 \$0	710000 \$1,420,000
ML-I,2 MAN-LIFT	U.C. per I		EA	0		0 \$0	o \$0	150000 \$300,00		0 \$0	150000 \$300,000
UM-I,2 UTILITY MODULE	U.C. per E		EA	0		0 \$0	0 \$0	<i>500000</i> \$1,000,000		0 \$0	500000 \$1,000,000
DM-1,2 DECON MODULE	U.C. per E	2.00	EA	0		0 \$0	0 \$0	300000 \$600,00		0 \$0	300000 \$600,000
GM-1,2 GROUTING MODULE	U.C. per E	2.00	EA	0		0 \$0	0 \$0	150000 \$300.000		0 \$0	150000 \$300,000
DC-1,2 DIRT CHUTE	U.C. per E	2.00	EA	0		0 \$0	o \$0	<i>75000</i> \$150,000		o \$0	75000 \$150,000
CAM-1.32 CAMERA SYSTEM	U.C. per L	s 1.00	LS	0		0 \$0	o \$0	700000 \$700,00		0 \$0	700000 \$ 700,000

OU 7-70 Staged Interim Action Project Name:

Stage III Project - Retrieval System Project - Option 2
Project Location: INEEL-RWMC

Estimate Number: 5974-2 Option 2-R

S. L. Austad Client:

Prepared By: S.N. Wasley/R.D.Adams

Code Description Contractor	-	Qtv	<u>UOM</u>	Hrs	<u>Resource</u>	<u>Labor</u>	<u>Eauipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	TOTAL
3.2.01 RETRIEVAL EQUIPMENT											
Memo: Equipment costs were provided by the BB	WI Engineerng	group, est	imate file co	ntaines the	se sheets with	notes and bas	sis of costs.				
SHIPPING FOR ABOVE EQUIPMENT	U.C. per LS	1.00	LS	0		° \$0	0 \$0	2000 0 \$20,000		o \$0	20000 \$20,000
Subtotal Sales Tax INEEUSubcontractorOverheads	0.00%					\$0 \$0 \$0	\$0 \$0 \$0	\$5,560,000 \$333,600 \$0	\$0	\$0 \$0 \$0	\$5,560,000 \$333,600 \$0
Subtotal Estimate Escalation Contingency						\$0 \$0	\$0 \$0	\$477,971 \$3,528,696		\$0 \$0	\$5,893,600 \$477,971 \$3,528,696
- Total 3.2.01 RETRIEVAL EQUIPMENT				0		\$0	\$0	\$9,900,267	\$0	\$0	\$9,900,267
3.2.02 WASH BAY EQUIPMENT 111791501410	U.C. per Ea.					0	2	16300	0 0	o	16300
Waste handling,for hazardous waste, 55 gal drum packer W/HEPA filter Memo: For load out of Wash Bay filter solids.	o.o. per La.	1.00	Ea.	0		\$0	0 \$0	\$16,300		\$0	\$16,300
WASH BAY FILTER FEED PUMP Memo: Taken from estimate #2646 SBW Treatment • NGL	U.C. per EA	2.00 Actual equi		0 ements are	undefinedat thi	o \$0 s point in the de	<i>o</i> \$0 esign development.	3700 \$7,400 Used the inform	\$0	0 \$0 2646 as an allow	3700 \$7,400 ance.
WASH BAY FILTER Memo: Taken from estimate #2646 SBW Treatment • NGL	U.C. per EA	2.00 Actual equi		0 ements are	undefinedat thi	0 \$0 s point in the de	<i>o</i> \$0 esign development.	60000 \$120,000 Used the inform	\$0	0 \$0 2646 as an allowa	60000 \$120,000 ance.

Project Name: OU 7-70 Staged Interim Action

Stage III Project - Retrieval System Project - Option 2

U.C. per SF

RETRIEVAL FACILITY STRUCTURE (RFS) FABRIC COVERING 127,300.00 SF 0

Project Location: *INEEL-RWMC*EstimateNumber: *5974-2 Option* 2-R

Client: S. L. Austad

Prepared By: S.N. Wasley/R.D.Adams

Estimate Type: **Project Support**

0 100000 \$0 \$100,000 \$0 \$140,000 \$0 \$243,700 \$0 \$14,622 \$0 \$0 \$0 \$20,950 \$0 \$154,666 \$0 \$433,938	\$0 \$0 \$0 \$0 \$0	\$0 \$0 \$0 \$0 \$0 \$0 \$0	\$243,700 \$14,622 \$0 \$258,322 \$20,950 \$154,666
\$0 \$100,000 \$0 \$243,700 \$0 \$14,622 \$0 \$0 \$0 \$20,950 \$0 \$154,666	\$0 \$0 \$0 \$0 \$0	\$0 \$0 \$0 \$0 \$0	\$100,000 \$243,700 \$14,622 \$0 \$258,322 \$20,950 \$154,666
\$0 \$14,622 \$0 \$0 \$0 \$0 \$20,950 \$0 \$154,666	\$0 \$0 \$0 \$0 \$0	\$0 \$0 \$0 \$0	\$14,622 \$0 \$258,322 \$20,950 \$154,666
\$0 \$154,666	\$0	\$0	\$20,950 \$154,666
\$0 \$433,938	\$0	\$0	\$433,938
0 130000 \$0 \$1 30,000 dded \$5,000 to price fo	\$0	0 \$0	130000 \$1 30, 000
\$0 \$7,800		\$0 \$0 \$0	\$130,000 \$7,800 \$0
\$0 \$11,176 \$0 \$82.505	\$0 \$0	\$0 \$0	\$1 37,800 \$11,176 \$82,505
\$231,481	\$0	\$0	\$231,481
	\$0 \$7,800 \$0 \$0 \$0 \$0 \$0 \$11,176 \$0 \$82.505	\$0 \$7,800 \$0 \$0 \$0 \$0 \$0 \$11,176 \$0 \$0 \$82.505 \$0	\$0 \$7,800 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$0 \$11,176 \$0 \$0 \$0 \$82.505 \$0 \$0

11 0 0 \$1,400,300 \$0 \$0

0 \$0 \$0

ONLY

PageNo.

\$1,400,300

Project Name: **OU 7-70 Staged Interim Action**

Stage III Project - Retrieval System Project - Option 2

Project Location: INEEL-RWMC Estimate Number: 5974-2 Option 2-R Client:

S. L. Austad Prepared By: S.N. Wasley/R.D.Adams

Estimate Type: Project Support

Code Description	Contractor	Qtv	UOM	<u>Hrs</u>	Resource Labor	<u>Eauipment</u>	<u>Materia</u> l	<u>Subcontractor</u>	<u>Other</u>	TOTAL
3.2.05 FABRIC STRUCTURES	-PROCUREMENT									
Memo: Costs are based	on information obtained from a fabric	building fabri	icator, tha	talso supplied	d the fabric building on the	GEM project. This	company unde	rstand the requiremen	nts at the INEEL	-
RFS SPECIALTY PERSO	U.C. per E ONNEL BALANCING DOOR	12.00	EA	0	o \$0	o \$0	800 6 \$96,000		o \$0	8000 \$96,000
MAIN SUPPORT BUILD	U.C.per SF ING- FRAME, FABRIC, & DOORS	31,200.00	SF	0	o \$0	o \$0	26.9 \$826,800		0 \$0	26.5 \$826,800
AIRLOCK CHARACTER	U.C. per SF IZATION STRUCTURE- FRAME, FABRIO		SF	0	o \$0	o \$0	3(\$126,000		<i>o</i> 50	30 \$126,000
Subtotal Sales Tax INEEL/Subcontractor Overhea	ads 0.00%				\$0 \$0 \$0	\$0 \$0 \$0	\$2,449,100 \$146,946	\$0	\$0 \$0 \$0	\$2,449,100 \$146,946 \$0
Subtotal Estimate Escalation Contingency					\$0 \$0	\$0 \$0	\$210,539 \$1,554,340	•	50 \$0	\$2,596,046 \$210,539 \$1,554,340
— Total 3.2.05 FABRIC STRU	CTURES-PROCUREMENT			0	\$0	\$0	\$4.360.925	\$0	\$0	\$4.360.925

3.2.06 LINER PANEL-PROCUREMENT

Memo:

Costs are based on a surface per square foot from the **GEM** facility. This structure is a special engineered and design structure. The structure is fabricated from stainless steel sheets and carbon steel frames. These panels are to be bolted together to form a radiological containmentarea. This is the same concept as the **GEM** project, with the exception that the panels will be supported by the WES structure. This cost per surface SF includes windows for viewing and lighting.

RFS	U.C.perSSF 120	0,000.00	SSF	0	o \$0	0 \$0	116.24 \$13,948,800	0 \$0	° \$0	116.24 \$13,948,800
WASH BAY STRUCTURE	U.C. per SSF	4,066.00	SSF	0	o \$0	0 \$0	1 <i>16.24</i> \$472,632	0 \$0	0 \$0	116.24 \$472,632
CLEAN AIRLOCK TRANSFER STRUCTURE	U.C. per SSF	3,611.00	SSF	0	o \$0	0 \$0	<i>116.24</i> \$419,743	0 \$0	0 \$0	116.24 \$419,743
HVAC ROOM STRUCTURE (@ 50% OF HVAC ROC	U.C.per SSF M) 22	2,509.00	SSF	0	o \$0	0 \$0	<i>116.24</i> \$2,616,446	0 \$0	\$0	<i>116.24</i> \$2,616,446

Project Name: OU 7-70 Staged Interim Action
Stage III Project * Retrieval System Project * Option 2
Project Location: /NEEL-RWMC
Estimate Number: 5974-2 Option 2-R

S. L. Austad Client:

Code D	<u>escription</u>	Contractor	_	Qtv	<u>UOM</u>	<u>Hrs</u>	Resource	<u>Labor</u>	<u>Eauiument</u>	<u>Material</u>	Subcontractor	<u>Other</u>	TOTAL
3.2.06 LINE	R PANEL-PROCUR	REMENT											
Мето:	carbon steel fram	on a surface per square fones. These panels are to be WES structure. This cost	e bolted togeth	er to form	a radiologic	al contain	mentarea. This						
PER	SONNEL AIRLOCK	STRUCTURE	U.C. per SSF	4,066.00	SSF	0		0 \$0	\$0	116.2 \$472,63		<i>o</i> \$0	116.24 \$472,632
MAIN	NTENANCE BAY GL	OVE BOX STRUCTURE	U.C.per SSF	5,215.00	SSF	0		o \$0	\$ 0	116.2 \$606,19		\$0	116.24 \$606,192
AIRL	OCK TO CHARACT	ERIZATIONSTRUCTURE	U.C. per SSF	15,240.00	SSF	0		<i>o</i> \$0	<i>o</i> \$0	116.2 \$1,771,498		<i>o</i> \$0	<i>i16.24</i> \$1,771,498
Subtotal Sales Ta: INEEUS	x ubcontractorOverhea	nds	0.00%					\$0 \$0 \$0	\$0 \$0 \$0	\$20,307,942 \$1,218,477 \$1	7 \$0	\$0 \$0 \$0	\$20,307,942 \$1,218,477 \$0
Subtotal Escalatio Continge								\$0 \$0	\$0 \$0	\$1,745,79 \$12,088,58		\$0 \$0	\$21,526,418 \$1,745,793 \$12,888,587
Total 3.2	2.06 LINER PANEL-F	PROCUREMENT				0		\$0	\$0	\$36,160,79	8 \$0	\$0	\$36,160,798
3.2.07 PLAN	NT AIR COMPRESS	OR-PROCUREMENT											
		/ AIR COMPRESSOR 50 H hardson estimating manual f		1.00 screw typ		0 r including:	a 200 gallon tank	0 \$0 k, enclosed cal	<i>o</i> \$0 binet. For additiona	2500 \$25,000 Information se	0 \$0	<i>o</i> \$0	25000 \$25,000
FILTE	ERATION SYSTEM F	FOR ABOVE COMPRESSO	<i>U.C. per EA</i> PR	1.00	EA	0		o \$0	o \$0	2 <i>00</i> \$2,000		o \$0	2000 \$2.000

Project Name: OU 7-10 Staged Interim Action

Stage III Project - Retrieval System Project - Option 2

Project Location: INEEL-RWMC
Estimate Number: 5974-2 Option 2-R

Client:

S. L Austad Prepared By: S.N. Wasley/R.D.Adams

Code Description Contrac	<u>to</u> r	Qtv	<u>UOM</u>	<u>Hrs</u>	Resource	<u>Labor</u>	<u>Eauipment</u>	<u>Material</u>	Subcontractor	<u>Other</u>	TOTAL
3.2.07 PLANTAIR COMPRESSOR-PROCUL	REMENT										
B. AIR COMPRESSOR TO BE PROVI POOL, NO COST TO PROJECT	<i>U.C. per</i> DEDBY BBWI EQUIPMEN	T 1.00)	0		<i>o</i> \$0	o \$0	0.0 \$		o \$0	0.01 \$0
Subtotal Sales Tax INEEUSubcontractorOverheads	0.00%					\$0 \$0 \$0	\$0 \$0 \$0	\$27,00 \$1,62 \$) \$0	\$0 \$0 \$0	\$27,000 \$1,620 \$0
Subtotal Estimate Escalation Contingency						\$0 \$0	\$0 \$0	\$2,32 \$17,13		\$0 \$0	\$28,620 \$2,321 \$1 7,136
Total 3.2.07 PLANT AIR COMPRESSOR-	-PROCUREMENT			0		\$0	\$0	\$48,07	7 \$0	\$0	\$48,077
CRITICALITY MONITORING SYSTEM Memo: Costs are based on the GEM project, circuits, warning lights, and audible a	U.C.par EA	3.00		0 d on assun	nptionthis projec	0 \$0 ct will require th	o \$0 sree complete systen	<i>8220</i> \$246,600 ns. The comple	o \$0	0 \$0 rm system, pane	82200 \$246,600 Il boards,
RAD MONITORING EQUIPMENT, BAS EQUIPEMNT FROM GEM PROJECT	<i>U.C. par LS</i> SED ON THE EXACT	1.00	LS	0		<i>0</i> \$0	o \$0	44420 \$444,200		0 \$0	444200 \$444,200
Memo: This cost is based on the GEM project hand monitors, rad monitors, friskers,			and quantities	swill be req	uired. The cost	for the GEM pr	oject included upda	tes to existingP	MC's. New equipment	included cams, a	air pumps,
Subtotal Sales Tax INEEUSubcontractorOverheads	0.00%					\$0 \$0 \$0	\$0 \$0 \$0	\$690,800 \$41,448 \$6	\$ \$0	\$0 \$0 \$0	\$690,800 \$41,448 \$0
Subtotal Estimate Escalation Continaencv						\$0 \$0	\$0 \$0	\$59,385 \$438.421		\$0 \$0	\$732,248 \$59,385 \$438.421
Total 3.2.08 RADIOLOGICAL/CRITICALIT PROCUREMENT	Y MONITORING EQUIP			0		\$0	\$0	\$1,230,055	\$0	\$0	\$1,230,055

Project Name: OU 7-70 Staged Interim Action
Stage III Project - Retrieval System Project - Option 2
Project Location: INEEL-RWMC
Estimate Number: 5974-2 Option 2-R

S. L. Austad Client:

Code Description Contractor		<u>Qtv</u>	<u>UOM</u>	Hrs.	Resource Labor	<u>Eauipment</u>	<u>Material</u>	Subcontractor	Other	TOTAL
3.2.10 HVAC EQUIPMENT-PROCUREMENT										
MIST ELIMINATOR	U.C. per EA	1.00	EA	0	° \$0	o \$0	<i>4866</i> \$48,660		0 \$0	48660 \$48,660
DUST COLLECTOR (55,000 CFM)	U.C.per EA	3.00	EA	0	o \$0	0 \$0	6800 \$204,000		o \$0	68000 \$204,000
BLOWER 300 HP (110,000 CFM)	U.C.per EA	2.00	EA	0	o \$0	0 \$0	13700 \$274,000		o \$0	<i>137000</i> \$274,000
BLOWER 150 HP (37,000 CFM)	U.C.per EA	2.00	EA	0	o \$0	o \$0	2663. \$53,266		o \$0	26633 \$53,266
VFD FOR 150 HP FAN MOTORS	U.C. per EA	2.00	EA	0	o \$0	0 \$0	<i>2240</i> 0 \$44,800		<i>o</i> \$0	<i>22400</i> \$44.800
VFD FOR 300 HP FAN MOTORS	U.C. per EA	2.00	EA	0	o \$0	o \$0	33300 \$66,600		0 \$0	33300 \$66,600
RFS PENTHOUSE (37,000 CFM)	U.C. per EA	1.00	EA	0	o \$0	° \$0	1000 \$10,000		o \$0	10000 \$1 <i>0</i> ,000
HEPA HOUSINGS 3H X 5W	U.C. per EA	2.00	EA	0	o \$0	o \$0	135000 \$270,000		0 \$0	135000 \$270,000
HEPA HOUSINGS 4H X 6W	U.C. per EA	2.00	EA	0	o \$0	0 \$0	<i>360000</i> \$720,000		o \$0	<i>360000</i> \$720,000
HEPA HOUSINGS3H X 6W	U.C. per EA	1.00	EA	0	o \$0	0 \$0	<i>16200</i> (\$162,000		o \$0	<i>162000</i> \$162.000
HEPA HOUSINGSDON/DOFT AREAS	U.C.per EA	4.00	EA	0	o \$0	0 \$0	8000 \$32,000		° \$0	8000 \$32,000
PLC CONTROL UNITS	U.C.per EA	2.00	EA	0	o \$0	0 \$0	2500 \$5,000		0 \$0	2500 \$5,000
AIR COMPRESSOR (25HP)	U.C. par EA	1.00	EA	0	0 \$0	o \$0	<i>1750</i> 0 \$17,500		o \$0	<i>17500</i> \$17,500

Project Name: OU 7-10 Staged Interim Action
Stage III Project - Retrieval System Project - Option 2
Project Location: INEEL-RWMC
Estimate Number: 5974-2 Option 2-R

S. L. Austad Client:

Prepared By: S.N. Wasley/R.D.Adams
Estimate Type: Project Support

Code Description Contractor		Qty _I	UOM Hrs	Resource Labor	<u>Equipment</u>	Material Sub	<u>contractor</u>	<u>Other</u>	TOTAL
321 0 HVAC EQUIPMENT-PROCUREMENT									
DESSICANT DRYER/FILTER	U.C. per EA	1.00 E	A 0	o \$0	0 \$0	12983 \$12,983	0 \$0	0 \$0	<i>12983</i> \$12,983
72" DIA. DAMPERS (LEAK PROOF- SPE	U.C. per EA CIALTY SST)	10.00 E	A 0	o \$0	0 <i>\$0</i>	25000 \$250,000	0 \$0	0 \$0	<i>25000</i> \$250,000
Subtotal Sales Tax INEEL/Subcontractor Overheads	0.00%			\$0 \$0 \$0	\$0 \$0 \$0	\$2,170,809 \$130,249 \$0	\$0 \$0 <i>\$0</i>	\$0 \$0 <i>\$0</i>	\$2,170,809 \$130,249 \$0
Subtotal Estimate Escalation Contingency				\$0 \$0	\$0 \$0	\$186,616 \$1.377.720	\$0 \$0	\$0 \$0	\$2,301,058 \$186.616 \$1.377.720
—Total 3.2.10 HVAC EQUIPMENT-PROCURE	MENT		0	\$0	\$0	\$3,865,394	\$0	\$0	\$3,865,394
3.2.11 CHILLER EQUIPMENT-PROCUREMENT 150 TON PACKAGED CHILLER	U.C. per EA	1.00 E/	A 0	o \$0	0 \$0	150000 \$150,000	o \$0	o \$0	150000 \$150,000
250 GALLON WATER TANK	U.C. per EA	1.00 E	Α 0	o \$0	0 \$0	5000 \$5,000	o \$0	o \$0	<i>5000</i> \$5,000
BOILER/WATER HEATER 3000 MBH	U.C. per EA	1.00 E/	Α 0	o <i>\$</i> 0	o \$0	34000 \$3 4,000	0 \$0	o <i>\$0</i>	<i>34000</i> \$34,000
5 HP PUMP	U.C. per EA	3.00 EA	Α 0	0 \$0	o \$0	<i>4550</i> \$13,650	<i>o</i> \$0	o \$0	<i>4550</i> \$13,650
25 HP PUMP	U.C. per EA	1.00 E/	Α 0	0 \$0	o \$0	<i>651</i> 1 \$6,511	o \$0	<i>o</i> \$0	651 1 \$6,51 1
VFD FOR 5 HP PUMP	U.C. per EA	1.00 EA	Α 0	0 \$0	0 \$0	2810 \$2,810	o \$0	0 \$0	2810 \$2,810

09/25/2003

Project Name: OU 7-70 Staged Interim Action
Stage III Project - Retrieval System Project - Option 2
Project Location: INEEL-RWMC
EstimateNumber: 5974-2 Option 2-R

Client: S. L. Austad

Prepared By: S.N. Wasley/R.D.Adams

Code Description Contractor	_	Qtv	<u>UOM</u>	Hrs	Resource	<u>Labor</u>	<u>Eauipment</u>	<u>Material</u>	Subcontractor	Other	TOTA
3.2.1.1 CHILLER EQUIPMENT-PROCUREMENT											
PLC CONTROLS UNITS	U.C.per EA	1.00	EA	0		o \$0	<i>o</i> \$0	250 \$2,500		o \$0	2500 \$2,500
3-WAY CONTROL VALVES	U.C. per EA	5.00	EA	0		0 \$0	o \$0	400 \$20,000		o \$0	4000 \$20,000
MANUAL CONTROLS VALVES	U.C. per EA	28.00	EA	0		o \$0	<i>o</i> \$0	120 \$33,600		0 \$0	1200 \$33,600
HEATER COIL 300 MBH	U.C. per EA	2.00	EA	0		0 \$0	<i>o</i> \$0	100 \$2,000		o \$0	1000 \$2,000
HEATER COIL 420 MBH	U.C. per EA	1.00	EA	0		o \$0	<i>o</i> \$0	140 \$1,400		o \$0	1400 \$1,400
HEATER COIL 1000 MBH	U.C. per EA	2.00	EA	0		0 \$0	o \$0	350 \$7,000		° \$0	3500 \$7,000
Subtotal Sales Tax INEEUSubcontractorOverheads	0.00%					\$0 \$0 \$0	\$0 \$0 \$0	\$278,471 \$16.708 \$0	3 \$0	\$0 \$0 <i>\$0</i>	\$278,471 \$16,708 <i>\$0</i>
Subtotal Estimate Escalation Contingency						\$0 \$0	\$0 \$0	\$23,939 \$176,734		\$0 \$0	\$295,179 \$23,939 \$176,734
—Total 3.2.1 1 CHILLER EQUIPMENT-PROCUREMENT				0		\$0	\$0	\$495,852	\$0	\$0	\$495,852
33 BBWI MATERIAL HANDLING FEE	W0 0								_		2.5
PROCUREMENT FEE	U.C. per \$ 33,76	69,291.00	\$	0		0 \$0	o \$0	\$0		0.12 \$4,052,315	0.12 \$4,052,315

Project Name: OU 7-70 Staged Interim Action
Stage III Project - Retrieval System Project - Option 2
Project Location: INEEL-RWMC

Estimate Number: 5974-2 Option 2-R

Client:

S. L. Austad

Code Description Contractor	Qtv UOM	Hrs Resource	<u>Labor</u>	<u>Eauipment</u>	<u>Material</u>	Subcontractor	<u>Other</u>	TOTAL
3.3 BBWI MATERIAL HANDLING FEE								
G&A	U.C.per\$ 4,052,315.00\$	0	0 \$0	o \$0	\$0		0.38 \$1,539,880	0.38 \$1,539,680
Subtotal Sales Tax INEEUSubcontractorOverheads	0.00%		\$0 \$0 \$0	\$0 \$0 \$0	\$0 \$0 \$ 0	\$0	\$5,592,195 \$0 \$0	\$5,592,195 \$0 \$0
Subtotal Estimate Escalation Contingency			\$0 \$0	\$0 \$0	\$0 \$0		\$453,527 \$3,346,234	\$5,592,195 \$453,527 \$3,348,234
Total 3.3 BBWI MATERIAL HANDLING FEE		0	\$0	\$0	\$0	\$0	\$9,393,956	\$9,393,956
4.1 CONSTRUCTION MANAGEMENT CONSTRUCTION MANAGEMENT	U.C.per\$ 96,817,74100 \$	0	o \$0	o \$0	c \$6		0.07 \$6,777,2 4 2	0.07 \$6,777,2 4 2
Subtotal Sales Tax INEEUSubcontractorOverheads	0.00%		\$0 \$0 \$0	\$0 \$0 \$0	\$0 \$0 \$0	\$0	\$6,777,242 \$0 \$0	\$6,777,242 \$0 \$0
Subtotal Estimate Escalation Continoency			\$0 \$0	\$0 \$0	\$0 \$0		\$905,440 \$3.766.408	\$6,777,242 \$905,440 \$3.766.408
Total 4.1 CONSTRUCTIONMANAGEMENT		0	\$0	\$0	\$0	\$0	\$1 1,449,089	\$11,449,089
4.2.01 GENERAL CONDITIONS GEN SUPERVISION	<i>U.C.perHRS</i> 521,739.00 HRS	0.12 \$40.00 62,609 CN-SUPR	4.8 \$2,504,347	0 \$0	o \$0		o \$0	4.8 \$2,504,347
Memo: @ 12% of labor hrs. Allow 55% of subcontr	act price as labor. Assume a \$40/hr rate to arr	ive at estimated labor hour	s included in sub	contractedwork.		·		

Project Name: OU 7-70 Staged Interim Action
Stage III Project - Retrieval System Project - Option 2
Project Location: INEEL-RWMC
Estimate Number: 5974-2 Option 2-R

S. L. Austad Client:

Code Description 4.2.01 GENERAL CONDITIONS	<u>Contractor</u>	_0	Qtv_	<u>UOM</u>	<u>Hrs</u>	Resource	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	Subcontractor	<u>Other</u>	TOTAL
Mobilization& Demobilization/demobil	GEN ation		1,140.00	\$	0	CN-SKWK	o \$0	o \$0	\$	0 0.006 0 \$128,047	o \$0	\$128 <u>3</u> 0047
CONSTRUCTION EQUIP Memo @ \$2 50 /LABOR HOUI		U.C. per HRS 52	1,739.00	HRS	0		0 \$0	\$2,086,956	\$	0 0 \$0	<i>o</i> \$0	\$2,086,956
SMALL TOOLS & CONSI Memo: @ 4% of construction la		<i>U.C. per</i> \$ 21,34	1,140.00	\$	0		° \$0	° \$0	0.0 \$853.646		o \$0	0.04 \$853.646
GENERAL CLEANUP Memo. @ 8% of construction la	GEN bor hours	U.C. per HRS 52	1,739.00	HRS		\$31.58 CN-LABR	2.526 \$1,318,121	o \$0	\$0	0 0 9 \$0	<i>o</i> \$0	2. <i>5</i> 26 \$1,318,121
CONDUCT OF OPERATION Memo: @ 5% of labor hours.	GEN ONS/CONDUCT OF MAINTI	<i>U.C. per HRS</i> ENANCE 52 ⁻	1,739.00	HRS		\$34.52 CN-SKWK	1.726 \$900,522	o \$0	\$6	o o) \$0	o \$0	1.726 \$900,522
QA Manager	GEN	U.C. per wks	104.00	wks		<i>\$70.00</i> CN-MGR	2800 \$291,200	° \$0	\$6	o o \$0	<i>o</i> \$0	2800 \$291,200
QA Clerk	GEN	U.C. per wks	104.00	wks		\$20.00 CN-CLRK	800 \$83,200	0 \$0	\$6	o) \$0	<i>o</i> \$0	<i>800</i> \$83,200
QC Inspector (ave 3 inspe	GEN ectors)	U.C. per wks	104.00	wks		\$40.00 CN-SUPR	4800 \$499,200	o \$0	\$0	0 0 \$0	<i>o</i> \$0	<i>4800</i> \$499,200
QA/QC Pickup (1 pickup)	GEN	U.C. per wks	104.00	wks	<i>40</i> 4,160	00E2060	0 \$0	<i>315.2</i> \$32,781	\$0	0 0 \$0	<i>o</i> \$0	<i>315.2</i> \$32,781
Craning Allowance • W/ O	GEN perator& Oiler	U.C. per Wk	104.00	Wk		\$34.20 CN-ENGR	<i>2736</i> \$284,544	1250 \$1 30,000	\$0	0 0 \$0	° \$0	3986 \$414,544

Project Name: OU 7-70 Staged Interim Action
Stage III Project - Retrieval System Project - Option 2
Project Location: INEEL-RWMC

Estimate Number: 5974-2 Option 2-R

S. L. Austad Client:

Code <u>Description</u>	Contractor	-	Qtv	_UOM_	Hrs.	Resource	<u>e Labor</u>	Equipment	<u>Material</u>	Subcontractor	<u>Other</u>	TOTAL
4.2.01 GENERAL CONDITIONS	ş											
CONSTRUCTIONWARE Memo: Based on Means Facili		U.C.perSF y our Nine-Block	15,000.00 Matrix factors	SF s assumin	0 ga#6or 7 oi	n the Matrix.	0 \$0	<i>0</i> \$0	\$6	0 75) \$1,125,000	o \$0	75 \$1,125,000
Subtotal Sales Tax INEEUSubcontractorOverhea	ads	29.03%					\$5,881,134 \$0 \$1,707,293	\$0	\$853,64 \$51,21 \$262,68	9 \$0	\$0 \$0 \$0	\$10,237,563 \$51,219 \$2,986,833
Subtotal Estimate Escalation Contingency							\$1,013,814 \$4,217,386		\$155,98 \$648,88		\$0 \$0	\$13,275,616 \$1,773,622 \$7,378,129
Total 4.2.01 GENERAL CON	NDITIONS			:	159,555		\$1 2,819,627	\$4,903,950	\$1,972,41	3 \$2,731,377	\$0	\$22,427,367
4.2.02.01.01.01Demo Lift Station	on Concrete											
00E1012 Cat 330 1.75cy Hoe	GEN	U.C. per hr	80.00	hr	1 80	00E1012	o \$0	91.41 \$7,313	\$0		o \$0	91.41 \$7,313
00E2010 12 cy End Dump	GEN	U.C. per hr	80.00	hr	2 160	00E2010	0 \$0	62.9 \$5,032	\$0 \$0		o \$0	62.9 \$5,032
CN-EQHV Equipment Operators, Cra	GEN ane Or Shovel	U.C. per hr	80.00	hr		\$35.49 CN-EQHV	35.49 \$2,839	o \$0	\$0 \$0		o \$0	35.49 \$2,839
CN-TRHV Truck Drivers, Heavy	GEN	U.C. per hr	80.00	hr		\$33.48 CN-TRHV	66.96 \$5,357	o \$0	\$0		o \$0	66.96 \$5,357

Project Name: OU 7-70 Staged Interim Action
Stage III Project - Retrieval System Project - Option 2
Project Location: INEEL-RWMC
Estimate Number: 5974-2 Option 2-R

Client: S. L. Austad

Code Description	Contractor		<u>Qtv</u>	<u>UOM</u>	<u>Hrs</u>	Resource	<u>Labor</u>	<u>Eauipment</u>	<u>Material</u>	Subcontractor	<u>Other</u>	TOTAL_
4.2.02.01.01.01 Demo Lift Station	on Concrete											
CN-LABE LABORER EXCAVATION TRENCHES	GEN I, BACKFILL, FOUNDATIOI	U.C.per hr NS,	80.00	hr	2 160	\$32.44 CN-LABE	64.88 \$5,190	o \$0	\$	0 0 0 \$0	<i>o</i> \$0	64.88 \$5,190
Subtotal Sales Tax INEEUSubcontractorOverhea	ds	29.03%					\$13.386 \$0 \$3,886	\$12,345 \$0 \$3,584	\$ \$	0 \$0	\$0 \$0 \$0	\$25,731 \$0 \$7,470
Subtotal Estimate Escalation Contingency							\$2,308 \$9,599	\$2,128 \$8,852	\$		\$0 \$0	\$33,201 \$4,436 \$18.451
Total 4.2.02.01.01.01 Demol	ift Station Concrete				400		\$29,179	\$26,909	\$	o \$0	\$0	\$56,088
4.2.02.01.01.02 Demo Lift Statio 00E1310 Grove RT522 20 tn Hydra	ELEC	U.C. per hr	10.00	hr	1 10	00E1310	o \$0	68.68 \$687	s	o o 0 \$0	o \$0	68.68 \$687
CN-EQHV Equipment Operators, Cra	ELEC ine Or Shovel	U.C. per hr	10.00	hr	<i>1</i> 10	\$35.49 CN-EQHV	<i>35.49</i> \$355	o \$0	·	0 0	o \$0	35.49 \$355
00E2040 15000lb GVW Flatbed	ELEC	U.C. per hr	10.00	hr	10	00E2040	<i>o</i> \$0	<i>11.08</i> \$111	\$	o o \$0	0 \$0	11.08 \$111
CN-TRHV Truck Drivers, Heavy	ELEC	U.C. per hr	10.00	hr	10	\$33.48 CN-TRHV	33.48 \$335	o \$0	\$	0 0 \$0	0 \$0	33.48 \$335
00E2060 3/4 tn 4x4 Pickup	ELEC	U.C. per hr	40.00	hr	1 40	00E2060	o \$0	7.88 \$315	\$	0 0 0 \$0	0 \$0	<i>7.88</i> \$315

Project Name: OU 7-70 Staged Interim Action
StageIll Project • Retrieval System Project • Option 2
Project Location: INEEL-RWMC
Estimate Number: 5974-2 Option 2-R

Client: S. L. Austad

Code Description	Contractor		Qtv	<u>UOM</u>	<u>Hrs</u>	Resource	<u>Labor</u>	<u>Equipment</u>	<u>Materia</u> l	Subcontractor	<u>Other</u>	TOTAL
4.2.02.01.01.02 Demo Lift Statio	on Electrical											
CN-ELEC Electricians	ELEC	U.C.per hr	40.00	hr		\$35.89 CN-ELEC	<i>71.78</i> \$2,871	o \$0	\$	0 0 \$0	<i>0</i> \$0	71.78 \$2.871
Subtotal Sales Tax INEEUSubcontractorOverhea	ds	48.10%					\$3,561 \$0 \$1,713	\$1,113 \$0 \$535	\$ \$ \$	0 \$0	\$0 \$0 \$0	\$4,674 \$0 \$2,248
Subtotal Estimate Escalation Contingency							\$705 \$2,931	\$220 \$916	\$ \$0		\$0 \$0	\$6,922 \$925 \$3,847
—Total 4.2.02.01.01.02 Demo l	ift Station Electrical				100		\$8,909	\$2,784	\$	o \$0	\$0	\$1 1,693
4.2.02.01.01.03 Demo Fire Pipe	in Berm											
00E1012 Cat 330 1.75 cy Hoe	GEN	U.C. per hr	20.00	hr	1 20	00E1012	0 \$0	<i>91.41</i> \$1,828	\$6	0 0 0 \$0	o \$0	<i>91.41</i> \$1,828
00E2010 12 cy End Dump	GEN	U.C. per hr	20.00	hr	2 40	00E2010	o \$0	62.9 \$1,258	\$6	o o \$0	o \$0	<i>62.9</i> \$1,258
CN-EQHV Equipment Operators, Cra	GEN ne Or Shovel	U.C. per hr	20.00	hr	20	\$35.49 CN-EQHV	<i>35.49</i> \$71 <i>0</i>	o \$0	\$0	0 0) <i>\$0</i>	o \$0	35.49 \$710
CN-TRHV Truck Drivers, Heavy	GEN	U.C.per hr	20.00	hr		\$33.48 CN-TRHV	66.96 \$1,339	o \$0	\$0	0 0 0 \$0	o \$0	<i>66.96</i> \$1,339

Project Name: OU 7-70 Staged Interim Action
Stage III Project - Retrieval System Project - Option 2
Project Location: INEEL-RWMC

Estimate Number: 5974-2 Option 2-R

S. L. Austad Client:

Prepared By: S.N. Wasley/R.D.Adams

Code <u>Description</u>	Contractor	Qtv UO	M Hrs	Resource	<u>Labor</u>	Equipment	<u>Material</u>	Subcontractor	<u>Other</u>	TOTAL
4.2.02.01.01.03 Demo Fire Pipe in	<u>n Berm</u>									
	GEN <i>U.C. per hr</i> BACKFILL, FOUNDATIONS,	20.00 hr		\$32.44 CN-LABE	64.88 \$1,298	o \$0	o \$0	o \$0	o \$0	64.88 \$1,298
Subtotal Sales Tax INEEVSubcontractor Overheads	s 29.03%				\$3,347 \$0 \$972	\$3,086 \$0 \$896	\$0 \$0 \$0	\$0 \$0 \$0	\$0 \$0 \$0	\$6,433 \$0 \$1,867
Subtotal Estimate Escalation Contingency					\$577 \$2.400	\$532 \$2,213	\$0 \$0	\$0 \$0	\$0 \$0	\$8,300 \$1, 1 09 \$4.613
Total 4.2.02.01.01.03 Demo Fir	e Pipe in Berm		100		\$7,295	\$6,727	\$0	\$0	\$0	\$14,022
4.2.02.01.01.04 Excavate New Ba	sin									
00E1012 Cat 330 1.75 cy Hoe	GEN U.C. per hr	60.00 hr	1 60	00E1012	° \$0	91.41 \$5.485	o \$0	0 \$0	0 \$0	91.41 \$5,485
CN-EQHV Equipment Operators, Crane	GEN U.C. per hr e Or Shovel	60.00 hr		\$35.49 CN-EQHV	35.49 \$2,129	0 \$0	0 \$0	° \$0	0 <i>50</i>	35.49 \$2,129
00E2010 12 cy End Dump	GEN U.C. per hr	60.00 hr	2 120	00E2010	0 \$0	62.9 \$3,774	0 \$0	o \$0	o \$0	62.9 \$3,774

Project Name:

OU 7-70 Staged Interim Action
Stage III Project • Retrieval System Project • Option 2

Project Location: INEEL-RWMC Estimate Number: 5974-2 Option 2-R

S. L. Austad Client:

Prepared By: S.N. Wasley/R.D.Adams

Code Description	Contractor	_	Qtv _	UOM H	rs	Resource	<u>Labor</u>	Equipment	<u>Materia</u> l	Subcontractor	<u>Other</u>	TOTAL
4.2.02.01.01.04 Excavate New	<u>Basin</u>											
CN-TRHV Truck Drivers, Heavy	GEN	U.C. perhr	60.00 h	hr		\$33.48 CN-TRHV	66.96 \$4,018	° \$0	\$	o o \$0	o \$0	66.96 \$4,018
Subtotal Sales Tax INEEL/Subcontractor Overhea	ads	29.03%					\$6,147 \$0 \$1,784	\$9,259 \$0 \$2,688	\$ \$ \$	50	50 \$0 \$0	\$15,406 \$0 \$4,472
Subtotal Estimate Escalation Contingency							\$1,060 \$4,408	\$1,596 56,639	\$) \$0) \$0	\$0 \$0	\$19,878 \$2,656 511,047
Total 4.2.02.01.01.04 Excav	rate New Basin			180			\$13,399	\$20,181	\$	0 \$0	\$0	\$33,580
4.2.02.01.01.05 Relocate North	<u>Berm</u>											
00E1012 Cat 330 1.75 cy Hoe	GEN	U.C. per hr	240.00 h	nr	1 240	00E1012	0 \$0	91.41 \$21,938	\$	0 0 0 \$0	0 \$0	91.41 \$21,938
00E0610 Cat 815 Sheepsfoot	GEN	U.C. per hr	240.00 h	nr	1 240	00E0610	<i>o</i> \$0	75.65 \$18,156	50	o o) \$0	o \$0	75.65 \$18,156
00E0962 Cat D7 Dozer	GEN	U.C. per hr	240.00 h	nr	1 240	00E0962	0 <i>\$0</i>	86.72 \$20,813	50	0) <i>\$0</i>	0 50	86.72 \$20,813
CN-EQHV Equipment Operators, Cr	GEN ane Or Shovel	U.C. per hr	240.00 h	nr		\$35.49 CN-EQHV	106.47 \$25,553	o 50	ş	0 0 \$0	0 50	106.47 525,553
00E2010 12 cy End Dump	GEN	U.C. per hr	240.00 h	nr	2 480	00E2010	° \$0	62.9 \$15,096	\$0	0 \$0	0 50	62.9 \$15,096

Project Name: OU 7-10 Staged Interim Action
Stage III Project - Retrieval System Project - Option 2
Project Location: INEEL-RWMC
Estimate Number: 5974-2 Option 2-R

Client: S. L. Austad

Prepared By: S.N. Wasley/R.D.Adams
Estimate Type: Project Support

Code Description Contractor		_Qtv_	UOM	Hrs	Resource	<u>Labor</u>	<u>EauiDment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	TOTAL
4.2.02.01.01.05 Relocate North Berm											
CN-TRHV GEN Truck Drivers, Heavy	U.C. per hr	240.00	hr	2 480	\$33.48 CN-TRHV	66.96 \$16,070	o \$0		0 0 0 \$0	<i>o</i> \$0	66.96 \$16,070
Subtotal Sales Tax INEEUSubcontractorOverheads	29.03%					\$41,623 \$0 \$12,083	\$76,003 \$0 \$22,064	\$ \$	0 \$0	\$0 \$0 \$0	\$1 17,626 \$0 \$34,147
Subtotal Estimate Escalation Contingency						\$7.1 75 \$29,847	\$13,102 \$54,499	\$ \$		\$0 \$0	\$151,773 \$20,277 \$84,346
Total 4.2.02.01.01.05 Relocate North Berm				1,200		\$90,728	\$165,668	\$	0 \$0	\$0	\$256,396
4.2.02.01.01.06 Ex & Backfill Discharae Pipe 00E1012 GEN Cat 330 1.75 cy Hoe	U.C. per hr	30.00	hr	1 30	00E1012	<i>o</i> \$0	91.41 \$2,742	\$	0 0 0 \$0	<i>0</i> \$0	91.41 \$2,742
00E0610 GEN Cat 815 Sheepsfoot	U.C.per hr	30.00	hr	1 30	00E0610	o \$0	75.65 \$2,270	\$	0 0 0 \$0	<i>0</i> \$0	75.6 5 \$2,270
CN-EQHV GEN Equipment Operators, Crane Or Shovel	U.C. per hr	30.00	hr		\$35.49 CN-EQHV	70.98 \$2,129	<i>o</i> \$0	ş	o o o \$0	<i>o</i> \$0	70.98 \$2,129
Subtotal Sales Tax INEEUSubcontractorOverheads	29.03%					\$2,129 \$0 \$618	\$5.012 \$0 \$1,455	\$1 \$0 \$1	\$0	\$0 \$0 \$0	\$7,141 \$0 \$2,073
Subtotal Estimate Escalation Contingency						\$367 \$1,527	\$864 \$3,594	\$0 \$0		\$0 \$0	\$9,214 \$1,231 \$5,121
-Total 4.2.02.01.01.06 Ex & Backfill Discharge Pipe				60		\$4,642	\$10,924	\$(0 \$0	\$0	\$15,566

Estimating Services Department

09/25/2003

Project Name: OU 7-70 Staged Interim Action
Stage III Project - Retrieval System Project - Option 2
Project Location: INEEL-RWMC
Estimate Number: 5974-2 Option 2-R

S. L. Austad Client:

Code Description	Contractor		<u>Qtv</u>	<u>UOM</u>	Hrs	Resource	<u>Labor</u>	Eauiument	Material	Subcontractor	<u>Other</u>	<u>TOTAL</u>
4.2.02.01.02.01 Concrete Lift	Station											
Fine Grade	GEN	U.C. persf	80.00	sf		\$31.58 CN-LABR	3.158 \$253	0.02 \$2	\$0	0 0 0 <i>\$0</i>	0 <i>\$0</i>	3.178 \$254
Form & Strip	GEN	U.C. persf	720.00	sf		\$37.16 CN-CARC	7.432 \$5,351	1.35 \$972	\$	0 0 \$0	0 \$0	8.782 \$6,323
Place Rebar	GEN	U.C.per lb	1,440.00	1b		\$43.50 CN-IRON	0.522 \$752	0.05 \$72	0.3 \$504		0 \$0	0.922 \$1,328
Place Concrete	GEN	U.C. percy	12.00	су		\$31.58 CN-LABR	15.79 \$189	° \$0	10 \$1,200		o \$0	115.79 \$1,389
Screed Concrete	GEN	U.C. per sf	160.00	sf		\$31.58 CN-LABR	0.19 \$30	0.02 \$3	\$0	0 0 9 80	0 \$0	0.21 \$34
Trowel Concrete	GEN	U.C. persf	160.00	sf		\$31.58 CN-LABR	0.474 \$76	0.08 \$13	\$0	0 0 \$0	o \$0	0.554 \$89
Cure Concrete	GEN	U.C. per sf	880.00	sf		\$31.58 CN-LABR	0.316 \$278	0.06 \$53	\$0	0 \$0	0 \$0	0.376 \$331
Embeds	GEN	U.C.per lb	1,000.00	lb		\$37.16 CN-CARC	2.973 \$2,973	o \$0	\$3,000		o \$0	5.973 \$5,973
Subtotal Sales Tax INEEUSubcontractor Overhe	eads	29.03%					\$9,902 \$0 \$2,874	\$1,114 \$0 \$324	\$4,704 \$282 \$1,448	2 \$0	\$0 \$0 \$0	\$15,720 \$282 \$4,645
Subtotal Estimate Escalation Contingency							\$1,707 \$7,100	\$192 \$799	\$860 \$3,575		\$0 \$0	\$20,648 \$2,759 \$11,475
-Total 4.2.02.01.02.01 Conc	rete Lift Station				267		\$21,583	\$2,429	\$10,869	\$0	\$0	\$34,881

Project Name: OU 7-70 Staged Interim Action

Stage III Project - Retrieval System Project - Option 2

Project Location: INEEL-RWMC Estimate Number: 5974-2 Option 2-R Client: S. L. Austad

S.N. Wasley/R.D.Adams Prepared By: Estimate Type: Project Support

TOTAL UOM <u>Hrs</u> **Equipment Material Subcontractor** Other **Code Description** Qtv Resource Labor Contractor 4.2.02.01.02.02 Ductbank Concrete GEN U.C.persf 0.18 \$37.16 6.689 1.35 0 0 0 8.039 Form & Strip 200.00 sf 36 CN-CARC \$1,338 \$270 \$0 \$0 \$0 \$1,608 GEN U.C. per lb 0.012 \$43.50 0.522 0.05 0.35 0 0 0.922 Place Rebar 420.00 lb 5 CN-IRON \$219 \$21 \$147 \$0 \$0 \$387 GEN U.C.per cy 2 \$31.58 63.16 100 0 0 163.16 n \$0 \$0 Place Concrete 6.00 cy 12 CN-LABR \$379 \$600 \$0 \$979 \$0 \$0 Subtotal \$1,936 \$291 \$747 \$2,974 Sales Tax \$0 \$0 \$0 \$45 \$0 \$45 INEEUSubcontractor Overheads \$0 \$84 \$230 \$0 29.03% \$562 \$876 Subtotal Estimate \$3,895 \$0 Escalation \$334 \$50 \$136 \$0 \$0 \$520 \$0 Contingency \$1,388 \$209 \$568 \$2,165 -- Total 4.2.02.01.02.02 Ductbank Concrete 53 \$4,220 \$634 \$0 \$0 \$6,580 \$1,726 4.2.02.01.05 METALS STEEL U.C.per sf 0.3 \$43.50 13.05 0 5 0 0 18.05 12 CN-IRON \$522 \$200 \$0 \$0 Grating 40.00 sf \$0 \$722

Project Name: OU 7-70 StagedInterim Action
Stage III Project - Retrieval System Project - Option 2
Project Location: INEEL-RWMC

Estimate Number: 5974-2 Option 2-R

S. L. Austad Client:

Prepared By: S.N. Wasley/R.D.Adams

Code Description	Contractor	_	Qtv UOM	Hrs Resource	<u>Labor</u>	<u>Eauipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	TOTAL
4.2.02.01.05 METALS										
Gates	STEEL	U.C. per ea	2.00 ea	15 \$43.50 30 CN-IRON	<i>652.5</i> \$1,305	0 \$0	1000 \$2,000	0 \$0	0 \$0	1 652 5 \$3,305
Subtotal Sales Tax INEEUSubcontractorOverhe	eads	41.93%			\$1,827 \$0 \$766	\$0 \$0 \$0	\$2,200 \$132 \$978	\$0 \$0 \$0	\$0 \$0 \$0	\$4,027 \$132 \$1,744
Subtotal Estimate Escalation Contingency					\$346 \$1,441	\$0 \$ 0	\$442 \$1,839	\$0 \$0	\$0 \$0	\$5,903 \$789 \$3.281
Total 4.2.02.01.05 METALS	3			42	\$4,381	\$0	\$5,591	\$0	\$0	\$9,972
4.2.02.01.15 MECHANICAL										
6" Pipe	PIPE	U.C.per If	20.00 lf	0.75 \$39.33 15 CN-PIPE	29.498 \$590	0 \$0	30 \$600	0 \$0	0 \$0	<i>59.498</i> \$1,190
Pipe Supports	PIPE	U.C. per ea	10.00 ea	2 \$39.33 20 CN-PIPE	78 . 66 \$787	0 \$0	10 \$100	0 \$0	o \$0	<i>88.66</i> \$887
Totalizer	PIPE	U.C. per ea	1.00 ea	2 \$39.33 2 CN-PIPE	<i>78.66</i> \$79	<i>o</i> \$0	<i>2000</i> \$2,000	o \$0	0 \$0	<i>2078.66</i> \$2,079

Project Name: **OU** 7-70 Staged Interim Action

Stage III Project - Retrieval System Project - Option 2
Project Location: INEEL-RWMC

Estimate Number: 5974-2 Option 2-R

Client: S. L. Austad

Prepared By: S.N. Wasley/R.D.Adams

Code Description Contractor		Qtv UOM	Hrs Resource	e <u>Labor</u>	<u>Eauipment</u>	<u>Materia</u> l	Subcontractor	<u>Other</u>	TOTAL
4.2.02.01.15MECHANICAL									
PIPE 3 0 CMP Discharge Pipe	U.C. per If	400.00 If	0.3 \$39.33 120 CN-PIPE	11.799 \$ 4, 720	<i>o</i> \$0	14 \$5,600		<i>0</i> \$0	25.799 \$1 0,320
Subtotal Sales Tax INEEUSubcontractorOverheads	48.10%			\$6,175 \$0 \$2,970	\$0	\$8,300 \$498 \$4,232	\$0	\$0 \$0 \$0	\$14,475 \$498 \$7,203
Subtotal Estimate Escalation Contingency				\$1,222 \$5,082		\$1,741 \$7,241		\$0 \$0	\$22,175 \$2,963 \$12,324
Total 4.2.02.01.15 MECHANICAL			157	\$15,449	\$0	\$22,012	\$0	\$0	\$37,462
4.2.02.01.16.01Switchaear & Transformers ELEC Fused Disc Switch, 480 volt 3R disc Memo: Panel pricing is based on GE Buy Log.	<i>U.C. per</i> Ea	1.00 Ea	2 \$35.89 2 CN-ELEC	71.78 \$72	<i>0</i> \$0	<i>550</i> \$550		0 \$0	621.78 \$622
Subtotal Sales Tax INEEUSubcontractor Overheads	48.10%			\$72 \$0 \$35	\$0 \$0 \$0	\$550 \$33 \$280	\$0	\$0 \$0 \$0	\$622 \$33 \$31.5
Subtotal Estimate Escalation Contingency				\$1.4 \$59	\$0 \$0	\$115 \$480	\$0 \$0	\$0 \$0	\$970 \$1.30 \$539
—Total 4.2.02.01.16.01Switchgear & Transformers			2	\$1.80	\$0	\$1,459	\$0	\$0	\$1,638
4.2.02.01.16.0Racewavs& Fittinas									
ELEC 1 " GRS conduit	U.C. per Lf	20.00 If	0.15 \$35.89 3 CN-ELEC	5.384 \$1.08	<i>o</i> \$0	1.35 \$27	° \$0	<i>o</i> \$0	6. 734 \$1.35
ELEC 1" LB w/GASK and Cover	U.C.per Ea	2.00 Ea	0.35 \$35.89 1 CN-ELEC	12.56 \$25	<i>o</i> \$0	12 \$24	<i>o</i> \$0	<i>0</i> \$0	24.56 \$49

Project Name:

OU 7-70 Staged Interim Action
Stage III Project - Retrieval System Project - Option 2

Project Location: *INEEL-RWMC*Estimate Number: 5974-2 Option 2-R

S. L. Austad Client:

Prepared By: S.N. Wasley/R.D.Adams

Code <u>Description</u>	Contractor	_	Qtv L	JOM Hrs	Resource	Labor	Eauipment	<u>Material</u>	Subcontractor	<u>Other</u>	TOTAL
4.2.02.01.16.02Raceways&	<u>Fittinas</u>										
1" LTF Conduit	ELEC	U.C. per If	10.00 lf	0.2 2	\$35.89 CN-ELEC	7.178 \$72	<i>o</i> \$0	2.5 \$25	<i>o</i> \$0	<i>o</i> \$0	9.678 \$97
2" rigid conduit	ELEC	U.C.per Lf	200.00 Lf		\$35.89 CN-ELEC	3.589 \$718	o \$0	2.75 \$550	<i>o</i> \$0	<i>o</i> \$0	6.339 \$1,268
2 spacers	ELEC	U.C. per Ea	20.00 Ea		\$35.89 CN-ELEC	3.589 \$72	<i>0</i> \$0	1 \$20	<i>0</i> \$0	<i>o</i> \$0	4.589 \$92
P-1 000 Unistrut	ELEC	U.C. per Lf	20.00 Lf		\$35.89 CN-ELEC	4.307 \$86	<i>0</i> \$0	3.5 \$70	0 \$0	<i>o</i> \$0	7.807 \$1.56
P-1000 Unistrut fitings,	ELEC allowance	U.C. per Ls	1.00 Ls		\$35.89 CN-ELEC	143.56 \$144	<i>0</i> \$0	<i>50</i> \$50	<i>0</i> \$0	<i>0</i> \$0	193.56 \$194
Subtotal Sales Tax INEEUSubcontractor Overh	neads	48.10%				\$1,224 \$0 \$589	\$0 \$0 \$0	\$766 \$46 \$391	\$0 \$0 \$0	\$0 \$0 \$0	\$1,990 \$46 \$979
Subtotal Estimate Escalation Contingency						\$242 \$1,007	\$0 \$0	\$161 \$668	\$0 \$0	\$0 \$0	\$3,015 \$403 \$1,676
Total 4.2.02.01.16.02 Rac	eways& Fittings			34		\$3,062	\$0	\$2,032	\$0	\$0	\$5,094
4.2.02.01.16.0€onductors &	& Grounding										
#2 bare copper	ELEC	U.C. per Lf	250.00 Lf		\$35.89 CN-ELEC	<i>0.718</i> \$1.79	0 \$0	0.35 \$88	o \$0	o \$0	1.068 \$267
#8 thhn copper wire	ELEC	U.C. per Lf	1,000.00 Lf		\$35.89 CN-ELEC	<i>0.431</i> \$431	o \$0	0.13 \$1 30	° \$0	o \$0	0.561 \$561
Allowance for jet-line, to	ELEC ru tape, pull rope	U.C. per Ls	1.00 Ls		\$35.89 CN-ELEC	<i>143.56</i> \$144	o \$0	50 \$50	0 \$0	0 \$0	193.56 \$1.94

Project Name: OU 7-70 Staged Interim Action
Stage III Project - Retrieval System Project * Option 2

Project Location: INEEL-RWMC
Estimate Number: 5974-2 Option 2-R

Client: S. L. Austad

Code Description Co	ontractor ing	<u>Qty</u>	<u>UOM</u>	<u>Hrs</u>	Resource	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	Subcontractor	<u>Other</u>	_TOTAL_
ELEC Terminations	C U.C. per ea	20.00	ea		\$35.89 CN-ELEC	8.973 \$179	<i>o</i> \$0	o. \$10		0 \$0	9.473 \$189
Subtotal Sales Tax INEEVSubcontractorOverheads	48.10%					\$933 \$0 \$449	\$0 \$0 \$0	\$278 \$17 \$1 4	7 \$0	\$0 \$0 \$0	\$1,211 \$17 \$590
Subtotal Estimate Escalation Contingency						\$185 \$768	\$0 \$0	\$5; \$24;		\$0 \$0	\$1,818 \$243 \$1,010
Total 4.2.02.01.16.03 Conductors &	Grounding			26		\$2,335	\$0	\$730	5 \$0	\$0	\$3,071
4.2.02.01.16.04Testing		4.00			\$35.89	1076.7	0		0 0	0	1076.7
Testing of systems and equipmer Subtotal Sales Tax		1.00	Ls	30	CN-ELEC	\$1,077 \$1,077 \$0	\$0 \$0 \$0	\$0 \$0 \$0	\$0 \$0	\$0 \$0 \$0	\$1,077 \$1,077 \$0
Subtotal Estimate Escalation Contingency	48.10%					\$518 \$213 \$886	\$0 \$0 \$0	\$0 \$0 \$0	\$0	\$0 \$0 \$0	\$518 \$1,595 \$213 \$886
Total 4.2.02.01.16.04 Testing				30		\$2,694	\$0	\$0	\$0	\$0	\$2,694
4.2.02.02.01 RFS EARTHWORK											
DIRT FOUNDATION EXCAVATION	U.C. per CY	4,855.00	CY	0		o \$0	o \$0	\$0	3.51) \$17,041	o \$0	3.51 \$17,041
DIRT FOUNDATION BACKFILL& COM	U.C. per CY	4,456.00	CY	0		0 \$0	0 \$0	\$0	13.87) \$61,805	o \$0	13.87 \$61,805

Project Name: **OU** 7-70 **Staged Interim Action**

Stage III Project - Retrieval System Project - Option 2
Project Location: INEEL-RWMC

Estimate Number: 5974-2 Option 2-R

Client:

S. L. Austad

Prepared By: S.N. Wasley/R.D.Adams

Code Description	Contractor		Qtv	<u>UOM</u>	<u>Hrs</u>	Resource	<u>Labor</u>	Equipment	Material	Subcontractor	Other	TOTAL
4.2.02.02.01 RFS EARTHWORK												
OVERBURDEN STAGING	DIRT S PIT EXCAVATION	U.C. perCY	3,513.00	CY	0		0 \$0	o \$0	\$0	0 3.51 O \$12,331	o \$0	3.51 \$12,331
PIT BACKFILL& COMPA	DIRT CT	U.C.perCY	597.00	CY	0		o \$0	o \$0	\$6	0 13.87 0 \$8,280	o \$0	13.87 \$8,280
SPREADEXCESSEXCA\	DIRT VATEDMATERIAL	U.C. per CY	3,315.00	CY	0		o \$0	o \$0	\$6	0 1.8 0 \$5,967	0 \$0	1.8 \$5,967
SHEET PILING	PILING	U.C. per SF	7,875.00	SF	<i>0.095</i> 748	\$37.43 B40	3.555 \$28,000	4.674 \$36,804	15.3 \$121,118		o \$0	23.609 \$185,921
SHEET PILING - MOB/DE	PILING MOB	U.C. per LS	1.00	LS		537.43 B40 MOB	5314.53 \$5,315	4881.69 \$4,882	\$0	0 0 0 \$0	o \$0	10196.22 \$10,196
Subtotal Sales Tax INEEUSubcontractorOverhead	ds	41.93%					\$33,314 \$0 \$13,970	\$41,686 \$0 \$17,480	\$121,118 \$7,267 \$53,835	\$0	\$0 \$0 \$0	\$301,541 \$7,267 \$129,493
Subtotal Estimate Escalation Contingency							\$6,317 \$26,277	\$7,905 \$32,881	\$24,345 \$101,266		\$0 \$0	\$438,301 \$58,557 \$243,580
Total 4.2.02.02.01 RFS EART	HWORK				890		\$79,878	\$99,951	\$307,831	\$252,777	\$0	\$740,437
4.2.02.02.02 WASH BAY EARTH	<u>IWORK</u>											
FOUNDATION EXCAVAT	DIRT ION	U.C. per CY	324.00	CY	o		o \$0	0 \$0	\$6	0 3.51) \$1,137	0 \$0	3.51 \$1,137
FOUNDATION BACKFILL	DIRT & COMPACT	U.C. per CY	119.00	CY	0		o \$0	o \$0	\$6	0 13.87 0 \$1,651	o \$0	13.87 \$1,651

Project Name: OU 7-10 Staged Interim Action
Stage III Project - Retrieval System Project - Option 2
Project Location: INEEL-RWMC
Estimate Number: 5974-2 Option 2-R

Client: S. L. Austad

Code Description Contractor		Qtv	<u>UOM</u>	<u>Hrs</u>	Resource Labor	EauiDment	<u>Material</u>	Subcontractor	<u>Other</u>	TOTAL
4.2.02.02.02 WASH BAY EARTHWORK										
DIRT SPREADEXCESSEXCAVATEDMATERIAL	U.C. per CY	205.00	CY	0	<i>o</i> \$0	<i>o</i> \$0		0 1.8 0 \$369	o \$0	1.8 \$369
Subtotal Sales Tax INEEVSubcontractor Overheads	41.93%				\$0 \$0 \$0	\$0 \$0 \$0	\$ \$ \$		\$0 \$0 \$0	\$3,157 \$0 \$1.324
Subtotal Estimate Escalation Contingency					\$0 \$0	\$0 \$0	\$		\$0 \$0	\$4,480 \$599 \$2,490
Total 4.2.02.02.02 WASH BAY EARTHWORK				0	\$0	\$0	\$	0 \$7,569	\$0	\$7,569
4.2.02.02.04 MAIN SUPPORT BUILDING EARTHWOR	K U.C. per CY	1,938.00	СҮ	0	0 \$0	0 \$0	\$	0 3.51 0 \$6,802	0 \$0	3.51 \$6,802
DIRT FOUNDATION BACKFILL& COMPACT	U.C. per CY	205.00		0	\$0 0 \$0	° \$0		0 13.87	0 \$0	\$0,802 13.87 \$2,843
DIRT SPREADEXCESSEXCAVATEDMATERIAL	U.C. per CY	1,733.00		0	o \$0	° \$0		0 1.8	o \$0	1.8 \$3,119
Subtotal Sales Tax INEEVSubcontractor Overheads	41.93%				\$0 \$0 \$0	\$0 \$0 \$0	\$(\$(\$(\$0	\$0 \$0 \$0	\$12,765 \$0 \$5,353
Subtotal Estimate Escalation Continaencv					\$0 \$0	\$0 \$ 0	\$6 \$6		\$0 \$0	\$18,118 \$2,421 \$10,069
Total 4.2.02.02.04 MAIN SUPPORT BUILDING EAF	RTHWORK			0	\$0	\$0	\$0	\$30,607	\$0	\$30,607

Project Name: OU 7-10 Staged Interim Action
Stage III Project - Retrieval System Project - Option 2
Project Location: INEEL-RWMC

Estimate Number: 5974-2 Option 2-R

S. L. Austad Client:

Code Description	Contractor	Qtv	<u>UOM</u>	Hrs	Resource Labor	<u>Ea</u>	uipment	<u>Material</u>	Subcontractor	<u>Other</u>	TOTAL
4.2.02.02.07CHARACTERIZATION	IAIRLOCK EARTHWORK										
FOUNDATION EXCAVATION	DIRT U.C. perCY	1,024.0	0 CY	0	;	o \$0	0 \$0	\$0		0 \$0	3.51 \$3,594
FOUNDATION BACKFILL & (DIRT U.C. per CY COMPACT	943.00	CY	0	;	0 \$0	<i>0</i> \$0	\$(<i>0</i> \$0	13.87 \$1.3,079
SPREADEXCESSEXCAVA	DIRT U.C. per CY TEDMATERIAL	81.00	CY	0	:	<i>o</i> \$0	<i>o</i> \$0	\$(<i>0</i> \$0	1.8 \$1.46
Subtotal Sales Tax INEEUSubcontractorOverheads	41.93%				Ş	\$0 \$0 \$0	\$0 \$0 \$0	\$0 \$0 \$0	\$0	\$0 \$ <i>0</i> \$0	\$16,819 \$0 \$7.053
Subtotal Estimate Escalation Contingency						\$0 \$0	\$0 \$0	\$0 \$0		\$0 \$0	\$23,872 \$3,189 \$13,267
Total 4.2.02.07.07 CHARACTER	IZATION AIRLOCK EARTHWORK			0	\$	\$ 0	\$0	\$C	\$40,328	\$0	\$40,328
4.2.02.03 ROADWAYS & PAVING											
G 4" ASPHALT PAVING	EN <i>U.C. per TN</i>	1,283.00	TN	0	\$	o 80	o \$0	\$0		0 \$0	<i>80</i> \$102,640
G LEVELING COURSUCRUSH	EN <i>U.C.</i> per CYD IED GRAVEL	1,082.00	CYD	0	\$	o 80	o \$0	\$0		o \$0	35 \$37,870

Project Name:

OU 7-10 Staged Interim Action Stage III Project - Retrieval System Project - Option 2

Project Location: *INEEL-RWMC*Estimate Number: 5974-2 Option 2-R

Client:

S. L. Austad

Code Description	Contractor	_	Qtv_	<u>UOM</u>	<u>Hrs</u>	Resource	<u>Labor</u>	<u>Equipment</u>	<u>Materia</u> l	Subcontractor	<u>Other</u>	TOTAL
4.2.02.03 ROADWAYS& PAVII	NG											
PIT RUN FILL	GEN	U.C. per CYD	2,100.00	CYD	0		o \$0	0 \$0	\$	o 15 0 \$31,500	o \$0	15 \$31,500
Subtotal Sales Tax INEEUSubcontractor Overhea	nds	29.03%					\$0 \$0 \$0	\$0 \$0 \$0	\$ \$ \$	0 \$0	\$0 \$ <i>0</i> \$0	\$172,010 \$0 \$49,935
Subtotal Estimate Escalation Contingency							\$0 \$0	\$0 \$0	\$ \$		\$0 \$0	\$221,945 \$29,652 \$123,343
Total 4.2.02.03 ROADWAYS	& PAVING				0		\$0	\$0	\$	0 \$374,939	\$0	\$374,939
4.2.03.01 RFS CONCRETE												
FOUNDATION WALLS	GEN	U.C.per CY	244.00	СҮ	0		o \$0	0 \$0	\$6	0 430 0 \$104,920	0 \$0	430 \$104,920
COLUMN FOOTINGS	GEN	U.C.perCY	155.00	СУ	0		0 \$0	0 \$0	\$6	0 430 0 \$66,650	0 \$0	430 \$66,650
EXISTING RAIL FDN. TO	GEN PPING	U.C. per CY	541.00	СҮ	0		o \$0	o \$0	ş	0 430 0 \$232,630	<i>o</i> \$0	<i>430</i> \$232,630
FLOORS	GEN	U.C. perCY	541.00	СҮ	0		o \$0	o \$0	\$0	0 <i>430</i> 0 \$232,630	o \$0	<i>430</i> \$232,630
AGV TRACK	GEN	U.C. per CY	577.00	CY	0		o \$0	° \$0	\$6	0 <i>430</i> 0 \$248,110	o \$0	<i>430</i> \$248,110

Project Name: OU 7-70 Staged Interim Action
Stage III Project - Retrieval System Project - Option 2
Project Location: INEEL-RWMC
Estimate Number: 5974-2 Option 2-R

S. L. Austad Client:

Code <u>DescriDtion</u> <u>Contractor</u>	Qtv UOM	Hrs Re	esource <u>Labor</u>	<u>Equipment</u>	<u>Material</u>	Subcontractor	<u>Other</u>	TOTAL
4.2.03.01RFS CONCRETE								
GEN U.C. per C OVERBURDEN STAGING PIT WALLS & BASE SLAB	636.00 CY	0	o \$0	o \$0	ş	0 430 0 \$273,480	0 \$0	430 \$273,480
Subtotal Sales Tax INEEL/Subcontractor Overheads 29.03%			\$0 \$0 \$0	\$0 \$0 \$0	\$0 \$0 \$0		\$0 <i>\$0</i> \$0	\$1,158,420 \$0 \$336,289
Subtotal Estimate Escalation Contingency			\$0 \$0	\$0 \$0	\$ (\$0 \$0	\$1,494,709 \$199,693 \$830,699
Total 4.2.03.01 RFS CONCRETE		0	\$0	\$0	\$(0 \$2,525,101	\$0	\$2,525,101
4.2.03.02WASH BAY CONCRETE GEN U.C. per CY BASIN FLOOR &WALLS	47.00 CY	0	o \$0	o \$0	şe	0 430 0 \$20,210	o \$0	430 \$20,210
Subtotal Sales Tax			\$0 \$0	\$0 \$0	\$(\$(\$0	\$0 \$0	\$20,210 \$0
INEEUSubcontractorOverheads 29.03%			\$0	\$0	\$0	\$5,867	\$0	\$5.867
Subtotal Estimate Escalation Contingency			\$0 \$0	\$0 \$0	\$0 \$0		\$0 \$0	\$26,077 \$3,484 \$14,493
Total 4.2.03.02 WASH BAY CONCRETE		0	\$0	\$0	\$0	\$44,053	\$0	\$44,053
4.2.03.04MAIN SUPPORT BUILDING CONCRETE GEN FLOOR & FOUNDATIONWALLS	, 955.00 CY	o	o \$0	0 \$0	(\$(0 430 0 \$410,650	o \$0	430 \$410,650

Project Name: OU 7-70 Staged Interim Action
Stage III Project - Retrieval System Project - Option 2
Project Location: INEEL-RWMC

Estimate Number: 5974-2 Option 2-R

S. L. Austad Client:

Code Description	Contractor	Qtv	<u>UOM</u>	Hrs	Resource	<u>Labor</u>	<u>Eauipment</u>	<u>Materia</u> l	Subcontractor	<u>Other</u>	TOTAL
4.2.03.04MAIN SUPPORT BUILD	ING CONCRETE										
Subtotal Sales Tax INEEUSubcontractorOverheads	29.03%					\$0 \$0 \$0	\$0 \$0 \$0	\$ \$ \$	0 \$0	\$0 \$0 \$0	\$41.0,650 \$0 \$119,212
Subtotal Estimate Escalation Contingency						\$0 \$0	\$0 \$0	\$(\$0 \$0	\$529,862 \$70,790 \$294,476
Total 4.2.03.04 MAIN SUPPOR	T BUILDING CONCRETE			0		\$0	\$0	Ş	0 \$895,127	\$0	\$895,127
4.2.03.07 CHARACTERIZATION A	IRLOCK CONCRETE										
FLOOR & FOUNDATION WA	GEN <i>U.C. per</i> ALLS	CY 159.0	o CY	0		\$0	**************************************	\$	0 430 0 \$68,370	0 \$0	430 \$68,370
Subtotal Sales Tax INEEUSubcontractorOverheads	29.03%					\$0 \$0 \$0	\$0 \$0 \$0	\$1 \$0 \$1) \$0 _,	\$0 \$0 \$0	\$68,370 \$0 \$1 9,848
Subtotal Estimate Escalation Continaency						\$0 \$0	\$0 \$0	\$0 \$1		\$0 \$0	\$88,218 \$1 1,786 \$49.028
—Total 4.2.03.07 CHARACTERIZ	ATIONAIRLOCK CONCRETE			0		\$0	\$0	\$0	\$149,032	\$0	\$149,032
4.2.05.01.01RFS STRUCTURAL S	TEEL										
STRUCTURAL STEEL & TR	STEEL U.C.per USS	TONS 1,718.0	00 TONS	10.2 17,524	\$42.71 STEEL1	435.676 \$748,491	241.57 \$415,017	166 \$2,865,6		0 \$0	2345.246 \$4,029,133

Project Name: OU 7-10 Staged Interim Action
Stage III Project - Retrieval System Project - Option 2
Project Location: INEEL-RWMC

Estimate Number: 5974-2 Option 2-R

Client:

S. L. Austad

Prepared By: S.N. Wasley/R.D.Adams

<u>Code</u> <u>Description</u> <u>Contractor</u>	_Qtv_	UON	<u>Hrs</u>	Resource	<u>Labor</u>	Equipment	Ma erial	Subcontractor	<u>Other</u>	TOTAL
4.2.05.01.01 RFS STRUCTURAL STEEL										
Subtotal Sales Tax	44 020/			_	\$748,491 \$0	\$415,017 \$0	\$2,865,624 \$171,937	7 \$0	\$0 \$0	\$4,029,133 \$171,937
INEEUSubcontractorOverheads	41.93%				\$313,865	\$174,029	\$1,273,741	\$0	\$0	\$1,761,635
Subtotal Estimate Escalation Contingency					\$141,931 \$590,385	\$78,697 \$327,352	\$575,990 \$2,395,925		\$0 \$0	\$5,962,705 5796,617 \$3,313,661
Total 4.2.05.01.01 RFS STRUCTURAL STEEL			17,524		\$1,794,672	\$995,095	\$7,203,217	\$0	\$0	\$10,072,983
4.2.05.01.02 RFS MISC. METALS										
055207800020 STEEL Railings, industrial welded, 2 rail, 3'-6" high, 1-1/2" pipe	U.C.perL.F. 12,866.00) L.F	0.125 1,608		5.452 \$70,152	0.346 \$4,453	14. \$185,270		0 \$0	20.199 \$259.875
055145000020 STEEL Ladder, steel, 20' wide, bolted to concrete, with cage	U.C. per V.L.F. 286.00	V.L.F.	0.64 183	\$43.62 E4	27.917 \$7,984	1.772 \$507	55. 4 \$15,873		0 \$0	85.189 \$24,364
055303400474 STEEL Floor grtg, plaf, cross bars @ 2" o.c., 1-1/4" x 3/16", over 300 S.F.	U.C. per S.F. 21,112.00) S.F.	0.093 1,963		3.875 \$81,813	2.36 \$49,822	11.2 \$236,454		o \$0	17.435 \$368,089
055177000100 STEEL Stair, stl, sfty nsg, stl stringers, grtg trd, pipe rlng, 4'-0" wide	<i>U.C. per Riser</i> 72.00) Riser	1.067 77	\$43.62 E4	46.543 \$3,351	2.954 \$213	13 \$9,864		o \$0	186.497 \$13,428
STEEL EMERGENCY EXIT STAIRWAYS -ALLOWANCE	U.C.per EA 6.00	EA	0	E4	o \$0	0 \$0	\$0		0 \$0	<i>15000</i> \$90,000

Project Name: OU 7-10 Staged Interim Action
Stage III Project - Retrieval System Project - Option 2
Project Location: INEEL-RWMC
Estimate Number: 5974-2 Option 2-R

Client: S. L. Austad Prepared By: S.N. Wasley/R.D.Adams

Code Description Contractor	_	Qtv	<u>UOM</u>	<u>Hrs</u>	Resource	<u>Labor</u>	<u>Eauipment</u>	<u>Material</u>	Subcontractor	<u>Other</u>	_TOTAL_
4.2.05.01.02 RFS MISC. METALS											
STEEL HEPA FILTER PLATFORMS	U.C. per LBS	900.00	LBS	0.013 11	\$43.62 E4	0.545 \$491	<i>0.035</i> \$31	\$2,70	3 0 0 \$0	o \$0	3.58 \$3.222
Subtotal Sales Tax INEEUSubcontractorOverheads	41.93%					\$163,791 \$0 \$68,682	\$55,025 \$0 \$23,074	\$450,162 \$27,010 \$200,092	0 \$0	\$0 \$0 \$0	\$758,978 \$27,010 \$329,588
Subtotal Estimate Escalation Contingency						\$31,058 \$129,192	\$10,434 \$43,402	\$90,482 \$376,377		\$0 \$0	\$1,115,575 \$149,041 \$619,960
Total 4.2.05.01.02RFS MISC. METALS				3,043		\$392,724	\$131,935	\$1,144,123	3 \$215,795	\$0	\$1,884,576
4.2.05.02 WASH BAY METALS STEEL HD SST GRATING FLOOR	U.C. per SF	850.00	SF	0.26 221	\$43.50 CN-IRON	11.31 \$9,614	6.41 \$5,449	30.7 : \$26,138		o \$0	48.47 \$41,200
STEEL SST GRATING SUPPORT MEMBERS	U.C. per TON	4.25	TON		\$43.50 CN-IRON	870 \$3,698	56 \$238	600 \$25,500		o \$0	6926 \$29,436
STEEL BASIN SST LINER	U.C. per SF	1,335.00	SF	2 2,670	\$43.62 E4	87.24 \$116,465	5.537 \$7,393	2 : \$28,035		<i>o</i> \$0	113.777 \$ 1 51,893
Subtotal Sales Tax INEEUSubcontractor Overheads	41.93%					\$129,776 \$0 \$54.419	\$13,079 \$0 \$5.484	\$79,673 \$4,780 \$35.414	\$0	\$0 \$0 \$0	\$222.528 \$4,780 \$95.317
Subtotal Estimate Escalation Contingency						\$24,609 \$102,363	\$2,480 \$10,316	\$16,014 \$86,614		\$0 \$0	\$322,626 \$43,103 \$179.293
Total 4.2.05.02 WASH BAY METALS				2,976		\$311,167	\$31,360	\$202,494	\$	\$0	\$545,021

Project Name: OU 7-10 Staged Interim Action
Stage III Project - Retrieval System Project - Option 2
Project Location: INEEL-RWMC

Estimate Number: 5974-2 Option 2-R

S. L. Austad Client:

Code Description Contractor	_	Qtv	UOM	<u>Hrs</u>	Resource	<u>Labor</u>	<u>Eauiument</u>	<u>Material</u>	Subcontractor	<u>Other</u>	<u>TOTAL</u>
4.2.05.03 CLEANTRANSFER AIRLOCK METALS											
STEEL STAINLESS FLOOR LINER	U.C. per SF	730.00	SF	2 1,460	\$43.62 E4	87.24 \$63,685	5.537 \$4,042	2 \$15,330		<i>o</i> \$0	1 13.777 \$83,058
Subtotal Sales Tax INEEUSubcontractor Overheads	41.93%					\$63,685 \$0 \$26,705	\$4,042 \$0 \$1,695	\$15,330 \$920 \$6,814	0 \$0	\$0 \$0 \$0	583,058 \$920 \$35,214
Subtotal Estimate Escalation Contingency						\$12,076 \$50,233	\$767 \$3,188	\$3,08 \$12.81		\$0 50	\$1 19,192 \$15,924 \$66,238
-Total 4.2.05.03 CLEANTRANSFER AIRLOCK METAL	S			1,460		\$152,699	\$9,692	\$38,962	\$0	\$0	\$201,354
4.2.05.04 MAIN SUPPORT BUILDING METALS STEEL GLOVEBOX STAINLESS FLOOR LINER	U.C. per SF	1,400.00	SF		\$43.62 E4	87.24 \$122,136	5.538 \$7,753	2 \$29,400		<i>o</i> \$0	113.778 \$159,289
STEEL PARTION WALL SUPPORT Memo: Allow 3.67 lbs/sf of wall area for support steel. Ass	U.C. per TON sume necessary	60.00 due to 24' he		612	\$42.71 STEEL1	435.676 \$26,141	241.57 \$14,494	166 \$100,080		o \$0	2345.246 \$140.715
STEEL STAIRS/LANDINGS OVER RAIL FOUNDATION	U.C. per EA	6.00	EA		\$42.71 STEEL1	384.42 \$2,307	213.15 \$1,279	77 \$4,620		<i>o</i> \$0	1367.57 \$8,205
Subtotal Sales Tax INEEUSubcontractor Overheads	41.93%					\$150,583 \$0 \$63.144	\$23,526 \$0 \$9.865	\$134.100 \$8,046 \$59.606	\$0	\$0 \$0 \$0	\$308,209 \$8,046 \$132.615
Subtotal Estimate Escalation Contingency						\$28,554 \$118.775	\$4,461 \$18,556	\$26,954 \$112.120		\$0 \$0	\$448,870 \$59,969 \$249.451
—Total 4.2.05.04 MAIN SUPPORT BUILDING METALS			3	3,466		\$361,056	\$56,408	\$340,826	\$0	\$0	\$758,290

OU 7-70 Staged Interim Action Project Name:

Stage III Project * Retrieval System Project - Option 2
Project Location: INEEL-RWMC
Estimate Number: 5974-2 Option 2-R

S. L. Austad Client:

Prepared By: S.N. Wasley/R.D.Adams
Estimate Type: Project Support

Code Description Contractor 4.2.05.05 HVAC ROOM METALS	-	Qtv	<u>UOM</u>	<u>Hrs</u>	Resource	Labor	<u>Eauipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	TOTAL
STEEL STAINLESS FLOOR LINER	U.C. per SF	6.500.00	SF	2 13,000	\$43.62 E4	87.24 \$567,060	5.538 \$35,994	2 \$136,500		<i>o</i> \$0	113.778 \$739,554
STEEL HEPA FILTER PLATFORMS	U.C.per LBS	4,350.00	LBS	0.013 54	\$43.62 E4	0.545 \$2,372	<i>0.035</i> \$151	\$13,050	o 50 \$0	, 0 \$0	3.58 \$15,572
Subtotal Sales Tax INEEUSubcontractorOverheads	41.93%					\$569,432 \$0 \$238,780	\$36,144 \$0 \$15,156	\$149,550 \$8,973 \$66,473	\$0	\$0 \$0 \$0	\$755,126 \$8.973 \$320,410
Subtotal Estimate Escalation Contingency						\$107,977 \$449,148	\$6,854 \$28.509	\$30,060 \$125,038	•	\$0 \$0	\$1,084,509 5144,890 \$602.695
—Total 4.2.05.05 HVAC ROOM METALS				13,054		\$1,365,337	\$86,664	\$380,094	\$0	\$0	\$1,832,095
4.2.05.06 PERSONNELAIRLOCK METALS STEEL STAINLESS FLOOR LINER	U.C. per SF	850.00	SF	2 1,700	\$43.62 E4	87.24 \$74,154	5.538 \$4,707	21 \$17,850		<i>o</i> \$0	113.778 \$96,711
Subtotal Sales Tax INEEUSubcontractorOverheads	41.93%					\$74,154 \$0 \$31,095	\$4,707 \$0 \$1,974	\$17,850 \$1,071 \$7,934	\$0	\$0 \$0 \$0	\$96,711 \$1,071 \$41,003
Subtotal Estimate Escalation Contingency						\$14,061 \$58,490	\$893 \$3,713	\$3,588 \$14,924	\$0 \$0	\$0 \$0	\$138,785 \$18,542 \$77,127
Total 42.05.06 PERSONNELAIRLOCK METALS				1,700		\$177,800	\$11,286	\$45,367	\$0	\$0	\$234,453
4.2.05.07 CHARACTERIZATIONAIRLOCK METALS STEEL STAINLESS FLOOR LINER	U.C. per SF	4,200.00	SF	2 8,400	\$43.62 E4	87.24 \$366,408	5.538 \$23,258	21 \$88.200		<i>o</i> \$0	113.778 \$477,866

PageNo.

Project Name:

OU 7-70 Staged Interim Action
Stage III Project - Retrieval System Project - Option 2

Project Location: INEEL-RWMC Estimate Number: 5974-2 Option 2-R

S. L. Austad Client:

Code Description Contra	actor	Qtv UON	i Hrs	Resource	<u>Labor</u>	<u>Eaubment</u>	<u>Material</u>	Subcontractor	<u>Other</u>	TOTAL
3.2.05.07 CHARACTERIZATIONAIRLOCK	METALS									
Subtotal					\$366,408	\$23,258	\$88,20		\$0	\$477,866
Sales Tax INEEUSubcontractorOverheads	41.93%				\$0 \$153,646	\$0 \$9,753	\$5,29 \$39,20		\$0 \$0	\$5,292 \$202,602
	41.9570				\$155,040	\$9,733	\$35,20	τ ορυ	ېر	
Subtotal Estimate Escalation					\$69,479	\$4,410	\$17,72	8 \$0	\$0	\$685,760 \$91,618
Contingency					\$289,010	\$18.345	\$73 , 74		\$0	\$381,098
-Total 4.2.05.07 CHARACTERIZATIONA	AIRLOCK METALS		8,400		\$878,543	\$55,765	\$224,167	7 \$0	\$0	\$1,158,476
.2.08.01 RFS DOORS & WINDOWS										
GEN	U.C. par EA			\$35.81	193.374	o	1314		0	1507.374
DOORS		98.00 EA	529	CN-CARP	\$18,951	\$0	\$128,77	2 \$0	\$0	\$147.723
Subtotal					\$18,951	\$0	\$128,77	2 \$0	\$0	\$147,723
Sales Tax	00.000/				\$0	\$0	\$7,72		\$0	\$7,726
INEEUSubcontractorOverheads	29.03%				\$5,501	\$0	\$39,62	5 \$0	\$0	\$45,127
Subtotal Estimate										\$200,576
Escalation Contingency					\$3,267 \$13,590	\$0 \$0	\$23,53 \$97,88		\$0 \$ 0	\$26,797 \$1 1 1,47 8
-Total 4.2.08.01RFS DOORS & WINDOV	vs		529		\$41,309	\$0	\$297,541	\$0	\$0	\$338,850
.2.08.04 MAIN SUPPORT BLDG, DOORS	& WINDOWS									
GEN	U.C.per ЕА				0	0	O		o	9000
SPECIAL SINGLE DOORS	•	8.00 EA	0		\$0	\$0	\$0	\$72,000	\$0	\$72,000
Memo: Special balancing doors to allow op	eration with negative pressur	e on one side.								

Project Name: OU 7-70 Staged Interim Action
Stage III Project - Retrieval System Project - Option 2
Project Location: INEEL-RWMC

Estimate Number: 5974-2 Option 2-R

Client: S. L. Austad

Code Description Contractor	_Q:	tv <u>UOM</u>	<u>Hrs</u>	Resource Labor	<u>Equipment</u>	<u>Material</u>	Subcontractor	<u>Other</u>	TOTAL
4.2.08.04 MAIN SUPPORT BLDG. DOORS &WINDOWS									
GEN SPECIAL DOUBLE DOORS Memo: Special balancing doors to allow operation with ne	U.C. per EA	13.00 EA one side.	0	0 \$0	o \$0	\$	0 13000 0 \$169,000	0 \$0	13000 \$169,000
Subtotal Sales Tax INEEUSubcontractorOverheads	29.03%			\$0 \$0 \$0	\$0 \$0 \$0	\$ \$ \$	0 \$0	\$0 \$0 \$0	\$241,000 \$0 \$69,962
Subtotal Estimate Escalation Contingency				\$0 \$0	\$0 \$0	\$ \$		\$0 \$0	\$310,962 \$41,545 \$172,829
Total 4.2.08.04 MAIN SUPPORT BLDG. DOORS & WII	NDOWS		0	\$0	\$0	\$(9525,336	\$0	\$525,336
Memo: Costs for the specialty airlock doors are but 15' X 15' AIRLOCK CLEAN TRANSFER DOORS	ased on vendor co	ntact provided by 2.00 SET	the BBWI en	ngineering group. 0 \$0	o \$0	ş	0 100000 0 \$200,000	0 \$0	100000 \$200.000
15' X 15' AIRLOCK CLEAN TRANSFER DOORS	•	2.00 SET	0				0 \$200,000		
15'X15' WASH BAY DOORS	U.C. per SET	2.00 SET	0	o \$0	0 \$0	\$0	o 100000 D \$200.000	0 \$0	100000 \$200,000
15' X 15' MAINTENTANCE GLOVE BOX DOORS	U.C. per SET	1.00 SET	0	o \$0	o \$0	\$1	0 100000 0 \$100,000	° \$0	100000 5100,000
Subtotal Sales Tax INEEUSubcontractor Overheads	0.00%			\$0 \$0 \$0	\$0 \$0 \$0	\$1 \$1 \$1	0 \$0	\$0 \$0 \$0	\$500,000 \$0 \$0
Subtotal Estimate Escalation Contingency				\$0 \$0	\$0 \$0	\$0 \$0		\$0 \$0	\$500,000 \$66,800 \$277,894
Total 4.2.08.10 SPECIALTY DOORS			0	\$0	\$0	\$(0 \$844,694	\$0	\$844,694

Project Name: OU 7-70 Staged Interim Action
Stage III Project - Retrieval System Project - Option 2
Project Location: INEEL-RWMC
Estimate Number: 5974-2 Option 2-R

Client:

S. L. Austad

Prepared By: S.N. Wasley/R.D.Adams

Code Description Contractor		Qtv	<u>UOM</u>	Hrs	Resource	<u>Labor</u>	Equipment	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	TOTAL
4.2.09.04 MAIN SUPPORT BUILDING FINISHES											
092601005200 GEN Ptn wl,5/8",gyp drwl,taped bs,wtr res,met std,NLB,25Ga,16"oc,3-5/8"w	U.C. per S.F.	32,328.00	S.F.		<i>\$37.96</i> CARP	2.409 \$77,864	o \$0	0.8 \$26,186		0 \$0	3.219 \$104,050
099109200840 PAINT Walls&cigs,conc,dry wl or plas,oil base,pnt 2 coats,sm fin,roller	U.C. per S.F.	64,656.00	S.F.		\$33.19 PORD	<i>0.448</i> \$28,970	o \$0	<i>0.0</i> \$5,819		<i>o</i> \$0	<i>0.538</i> \$34,789
Subtotal Sales Tax INEEUSubcontractor Overheads	32.25%					\$108,834 \$0 \$34,752	\$0 \$0 \$0	\$32.005 \$1,920 \$10,644	\$0	\$0 \$0 \$0	9138,839 \$1,920 \$45,396
Subtotal Estimate Escalation Contingency						\$18,916 \$78,686	\$0 \$0	\$5,954 \$24,769		\$0 \$0	\$186,155 \$24,870 \$103,455
Total 4.2.09.04 MAIN SUPPORT BUILDING FINISH	HES			2,924		\$239,188	\$0	\$75,293	\$0	\$0	\$314,481
4.2.09.10 STRIPPABLE COATINGS											
STRIPPABLE COATINGS- RETRIEVAL FACILIT	<i>U.C. perSSF</i> TYSTRUCTURE	120,400.00	SSF	0		o \$0	0 \$0	\$0		<i>o</i> \$0	3 5 \$421,400
STRIPPABLE COATINGS-CLEAN AIRLOCK TE STRUCTURE	<i>U.C.</i> perSSF RANSFER	3,611.00	SSF	o		o \$0	o \$0	\$0		o \$0	<i>35</i> \$12.639
STRIPPABLE COATINGS- HVAC ROOM STRU HVAC ROOM)	<i>U.C. per SSF</i> CTURE (@ 50% OF	22,509.00	SSF	0		o \$0	o \$0	\$0		o \$0	3.5 \$78,782
STRIPPABLE COATINGS-PERSONNEL AIRLO	<i>U.C.</i> perSSF OCK STRUCTURE	4,066.00	SSF	0		o \$0	o \$0	\$0		o \$0	3 <i>5</i> \$14,231
STRIPPABLE COATINGS-MAINTENANCE BAY STRUCTURE	<i>U.C. per SSF</i> Y GLOVE BOX	5,215.00	SSF	0		o \$0	o \$0	\$0 \$0		o \$0	3.5 \$1 8,253

Project Name: OU 7-70 Staged Interim Action
Stage III Project - Retrieval System Project - Option 2
Project Location: INEEL-RWMC

Estimate Number: 5974-2 Option 2-R

S. L. Austad Client:

Prepared By: S.N. Wasley/R.D.Adams

Code Description	Contractor	_	Qtv	UOM -	Hrs	Resourc	e <u>Labor</u>	<u>Equipment</u>	<u>Materia</u> l	Subcontractor	<u>Other</u>	TOTAL
4.2.09.10 STRIPPABLE COATINGS	3											
STRIPPABLE COATINGS-A STRUCTURE		<i>U.C.per</i> SSF IZATION	15,240.00	SSF	0		0 \$0	0 <i>\$0</i>	Ş	0 3.5 0 \$53,340	0 \$0	3.5 \$53,340
Subtotal Sales Tax INEEUSubcontractorOverheads	C	0.00%					\$0 <i>\$0</i> <i>\$0</i>	\$0 <i>\$0</i> <i>\$0</i>	\$ \$(\$(0 \$0	\$0 50 \$0	\$598,644 \$0 \$0
Subtotal Estimate Escalation Contingency							\$0 \$0	\$0 \$0	\$6 \$6		\$0 \$0	\$598,644 \$79,979 \$332,693
Total 4.2.09.10 STRIPPABLE CO	DATINGS				0		\$0	\$0	\$(0 \$1,011,315	\$0	\$1,011,315
4.2.11.01 WASH BAY EQUIPMENT												
111791501410 P Waste handling, for hazardou packer W/HEPA filter Memo. For load out of Wash Bay fi	swaste, 55 gal drum	J.C. per Ea.	1.00	Ea.		\$39.33 CN-PIPE	786.6 \$707	0 \$0	\$	0 0 \$0	o \$0	78 6 6 \$787
P WASH BAY FILTER FEED P Memo: Taken from estimate #2646	UMP	J.C.perEA	2.00 Actual equip		40	\$39.33 CN-PIPE undefined at t	786.6 \$1,573 his point in the de	0 \$0 esign development.	\$0		0 <i>\$0</i> 2646 as an allov	786 6 \$1,573 vance.

Project Name: OU 7-10 Staged Interim Action
Stage III Project - Retrieval System Project * Option 2
Project Location: INEEL-RWMC

Estimate Number: 5974-2 Option 2-R

S. L. Austad Client:

Prepared By: S.N. Wasley/R.D.Adams
Estimate Type: Project Support

Code Description	Contractor		Qtv	<u>UOM</u>	<u>Hrs</u>	Resource	Labor	<u>EauiDment</u>	<u>Material</u>	Subcontractor	<u>Other</u>	TOTAL
4.2.11.01 WASH BAY EQUIPME	<u>ENT</u>											
WASH BAY FILTER Memo: Taken from estimate #2	PIPE 646 SBW Treatment • NG	U.C. per EA	2.00 Actual equip			\$39.33 CN-PIPE undefinedat this	3146.4 \$6,293 s point in the d	o \$0 esign development.	\$0 \$0 Used the inform	\$0	<i>0</i> \$0 2646 as an allowa	3146 4 \$6,293 Ince.
Subtotal Sales Tax INEEUSubcontractorOverhea	ds	48.10%					\$8,653 \$0 \$4,162	\$0 \$0 \$0	\$0 \$0 \$0	\$0	\$0 <i>\$0</i> \$0	\$8,653 <i>\$0</i> \$4,162
Subtotal Estimate Escalation Continaencv							\$1,712 \$7.122	\$0 \$0	\$0 \$0	ΨΟ	\$0 \$0	\$12,815 \$1,712 \$7.122
Total 4.2.11.01 WASH BAY E	EQUIPMENT				220		\$21,648	\$0	\$0	\$0	\$0	\$21,648
Memo. Mock-up costs are base information is available in Subtotal Sales Tax INEEL/Subcontractor Overhead	in estimating back-up file.							\$0 \$0 \$0	current cost to d	\$2,606,000 \$0	\$0 \$0 \$0 \$0	\$2,606,000 \$0 \$0
Subtotal Estimate Escalation									,	· · · · · · · · · · · · · · · · · · ·	·	
Contingency							\$0 \$0	\$0 \$0	\$0 \$0		\$0 \$0	\$2,606,000 \$348,162 \$1,448,259
Contingency	DCK-UP				0					\$1,448,259		\$348,162
Contingency Total 4.2.13.01 FACILITY MC 4.2.13.02.01 ERECT FABRIC ST		square footages	this unit co	ests also inc		ment for struct	\$0 \$0	\$0 \$0	\$C	\$1,448,259 \$4,402,421	\$0	\$348,162 \$1,448,259

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Project Name: **OU** 7-70 **Staged Interim Action**

Stage III Project - Retrieval System Project - Option 2

Project Location: INEEL-RWMC Estimate Number:5974-2 Option 2-R Client: **S.** L. **Austad**

Prepared By: S.N. Wasley/R.D.Adams

Estimate Type: **Project Support**

Code Description	Contractor	Qty	UOM	<u>Hrs</u>	Resource	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	TOTAL
4.2.13.02.01 ERECT FABRIC ST	RUCTURES										
Memo: Unit costs are bas	sed on the GEM project square footag	ges, this unit o	costs also in	clude equip	oment for struc	ture erection	, anchoring, door in	stallation and l	abor.		
ERECT-MAINSUPPORT DOORS	<i>U.C.perS</i> BUILDING-FRAME, FABRIC, &	31,200.00) SF	0		\$0	o \$0	26. \$826,800		0 \$0	39.1 \$1,219,920
ERECT-AIRLOCK CHARA FABRIC	<i>U.C.per S</i> ACTERIZATIONSTRUCTURE- FRAME		SF	0		0 \$0	\$0 \$0	30 \$126,000		<i>0</i> \$0	42 6 \$178,920
Subtotal Sales Tax INEEUSubcontractorOverhead	ds 0.00%					\$0 \$0 \$0	\$0 \$0 \$0	\$2,353,100 \$141 ,1 86 \$ 0	\$0	\$0 \$0 \$0	\$3,601,130 \$141,186 \$0
Subtotal Estimate Escalation Contingency						\$0 \$0	\$0 \$0	\$333,237 \$1,386,173		\$0 \$0	\$3,742,316 \$499,973 \$2,079,756
—Total 4.2.13.02.01 ERECT FA	BRIC STRUCTURES			0		\$0	\$0	\$4,213,698	\$2,108,347	\$0	\$6,322,046

4.2.13.02.02 ERECT LINER PANELS

Costs are based on a surfaceper square foot from the **GEM** facility. The structure is fabricated from stainless steel sheets and carbon steel frames. These panels are to be bolted together to form a radiological containment area. This is the same concept as the **GEM** project, with the exception that the panels will be supported by the **WES** structure. This cost per surface **S** F includes windows for viewing and lighting. This unit cost also includes sealing and pressure testing of the structure.

ERECT-RCS RETRIEVAL STRUCTURE	U.C.per SSF 120,400.00 SSF	0	o \$0	0 \$0	0 \$0	38.85 \$4,677,540	0 \$0	38.85 \$4,677,540
ERECT-RCS WASH BAY STRUCTURE	<i>U.C.per</i> SSF 4,066.00 SSF	0	o \$0	o \$0	° \$0	38.85 \$157,964	0 \$0	38.85 \$157,964
ERECT-RCS CLEAN AIRLOCK TRANSFER STRUC	U.C. per SSF CTURE 3,611.00 SSF	0	0 \$0	0 \$0	0 \$0	38.85 \$140.287	o \$0	<i>38.85</i> \$140,287
ERECT-RCSHVAC ROOMSTRUCTURE (@ 50% (U.C. per SSF DF HVAC ROOM\$2,509.00 SSF	0	° \$0	o \$0	° \$0	38.85 \$874.475	0 \$0	<i>38.85</i> \$874,475
ERECT-RCS PERSONNEL AIRLOCK STRUCTURE	U.C. per SSF 4,066.00 SSF	0	0 \$0	o \$0	o \$0	38.85 \$1 57,964	o \$0	38.85 \$157,964

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Project Name: OU 7-10 Staged Interim Action

Stage III Project - Retrieval System Project - Option 2
Project Location: INEEL-RWMC
Estimate Number: 5974-2 Option 2-R

Client: S. L. Austad

Code Description	Contractor	_Qtv_	<u>UOM</u>	<u>Hrs</u>	Resource	<u>Labor</u>	<u>Eauipment</u>	<u>Materia</u> l	Subcontractor	<u>Other</u>	_TOTAL
4.2.13.02.02 ERECT LINE	ER PANELS										
form a rad	pased on a surface per square fo iological containment area. This indows for viewingand lighting.	s is the same concept as	the GEM pro	ject, with th	e exception tha	at the panels					•
ERECT-RCS MAIN	NTENANCEBAY GLOVE BOX ST	U.C. per SSF RUCTURE 5,215.0	0 SSF	0		0 \$0	0 \$0	\$0	0 38.85 3 \$202,603	<i>o</i> \$0	38.85 \$202,603
ERECT-RCS AIRL	OCK TO CHARACTERIZATION S	U.C. per SSF STRUCTURE 15,240.0	00 SSF	0		o \$0	o \$0	\$	0 38.85 0 \$592,074	o \$0	38.85 \$592,074
Subtotal Sales Tax INEEL/Subcontractor O	verheads	0.00%				\$0 \$0 \$0	\$0 \$0 \$0	\$(\$) \$(0 \$0	\$0 \$0 \$0	\$6,802,907 <i>\$0</i> \$0
Subtotal Estimate Escalation Contingency						\$0 \$0	\$0 \$0	\$6 \$6		\$0 \$0	\$6,802,907 \$908,868 \$3,780,650
Total 4.2.13.02.02 ER	ECT LINER PANELS			0		\$0	\$0	\$0	\$11,492,425	\$0	\$11,492,425
4.2.14.04 MAIN SUPPOR	T BLDG. CONVEYING SYSTEMS	ì									
	STEEL /EBOX CRANE INSTALLATION ds. Added 50% to manhours for b		0 LS Matrix.		\$42.71 STEEL1	<i>5125.6</i> \$5,126	2842 \$2,842	\$0	0 0 \$0	<i>o</i> \$0	<i>7967</i> 6 \$7,968
Subtotal Sales Tax INEEUSubcontractorO	verheads	41.93%				\$5,126 \$0 \$2,149	\$2,842 \$0 \$1,192	\$0 \$0 \$0	\$0	\$0 \$0 \$0	\$7,968 \$0 \$3,341
Subtotal Estimate Escalation Contingency						\$972 \$4,043	\$539 \$2,242	\$0 \$0		\$0 \$0	\$11,309 \$1,511 \$6,285
-Total 4.2.14.04 MAIN	SUPPORT BLDG. CONVEYING S	SYSTEMS		120		\$1 2,290	\$6,815	\$0	\$0	\$0	\$19,105

Project Name: OU 7-10 Staged Interim Action

EXHAUST STACK 40" X 65 FT HIGH (C.S.) INCLUDING

Stage III Project - Retrieval System Project - Option 2

U.C. per LBS

41,393.00 LBS

Project Location: *INEEL-RWMC*Estimate Number: *5974-2 Option 2-R*

Client: S. L. Austad

Prepared By: S.N. Wasley/R.D.Adams

3.94

\$1,63,088

Estimate Type: **Project Support**

Code Description	Contractor		Qtv	<u>UOM</u>	Hrs	Resource	<u>Labor</u>	Eauipment	<u>Material</u>	Subcontractor	<u>Other</u>	<u>TOTAL</u>
4.2.15.01.01HVAC - DUCTWO	<u>RK</u>											
STAINLESS STEEL DUC	HVAC CTWORK	U.C. per LBS	338,230.00	LBS		\$36.82 CN-SHEE	7.364 \$2,490,726	0.3 \$1.01,469	\$676 , 46		<i>o</i> \$0	9.664 \$3,268,655
GALVANIZED STEEL DU	HVAC JCTWORK	U.C. per LBS	129,380.00	LBS		\$36.82 CN-SHEE	2.946 \$381,102	0.3 \$38,814	0.75 \$97,03		o \$0	3.996 \$51 6,951
Subtotal Sales Tax INEEUSubcontractorOverhea	ads	45.64%					\$2,871,827 \$0 \$1,310,576	\$140,283 \$0 \$64,019	\$773,49 \$46,41 \$374,168	0 \$0	\$0 \$0 \$0	\$3,785,605 \$46,410 \$1,748,763
Subtotal Estimate Escalation Contingency							\$558,769 \$2,324,357	\$27,295 \$113,540	\$159,52 \$663,60		\$0 \$0	\$5,580,778 \$745,592 \$3,101,499
-Total 4.2.15.01.01HVAC - D	UCTWORK				77 , 996		\$7,065,529	\$345,137	\$2,017,20	3 \$0	\$0	\$9,427,869
40.45.04.00 EVIDALIOT OTA CIV.												
4.2.15.01.02 EXHAUST STACK												

BASE

Memo: Costs are based on the exhaust stack built and installed for the GEM project, but sized accordingly to support this Stage III project. Assume the stack base to be 105" in dia. and a 40" dia for the main stack section x 65 ft high, all fabricated from carbon steel materials. Estimatedweight including base to be around 41,393bs.

\$0

\$0

\$163,088

\$0

Project Name: OU 7-70 Staged Interim Action

Stage III Project - Retrieval System Project - Option 2
Project Location: INEEL-RWMC

Estimate Number: 5974-2 Option 2-R

S. L. Austad Client:

Prepared By: S.N. Wasley/R.D.Adams

Code Description Contractor	_	Qtv	<u>UOM</u>	<u>Hrs</u>	Resource	<u>Labor</u>	<u>Eauiument</u>	<u>Material</u>	Subcontractor	<u>Other</u>	TOTAL
4.2.15.01.02 EXHAUST STACK											
INSTALLATION OF EXHAUST STACK Memo: Stack installationcosts are based on the GEM pro		41,393.00 ed accordin		0 v stack RC	OM design dimens	o \$0 ions. Estimate	o \$0 ed weight, including b	\$0		° \$0	2.3 \$95,204
Subtotal Sales Tax INEEUSubcontractorOverheads	0.00%					\$0 \$0 \$0	\$0 \$0 \$0	\$\ \$\ \$	0 \$0	\$0 <i>\$0</i> <i>\$0</i>	\$258,292 \$0 \$0
Subtotal Estimate Escalation Contingency						\$0 \$0	\$0 \$0	\$0 \$0		\$0 \$0	\$258,292 \$34,508 \$143,545
-Total 4.2.15.01.02 EXHAUSTSTACK				0		\$0	\$0	\$0	0 \$436,345	\$0	\$436,345
Memo: Based on the GEM project designand cos EXHAUST STACK MONITOIRING EQUIPMENT	t. Assume the G	3EM projec 1.00		Il besuffic 0	ent, not costadji	ustment need 0 \$0	o \$0	1 <i>6000</i> 4 \$160,000		<i>o</i> \$0	<i>160000</i> 5160,000
. , .					ent, not costadj	0	0	160000			
INSTALLATION OF MONITORING EQUIPMENT	U.C. per LS	1.00	LS	0		0 \$0	o \$0	\$0		° \$0	<i>9000</i> \$9,000
VOC MONITORING EQUIPMENT Memo: Cost are based on an allowance provided by Ryan	U.C. per LS McMurtrey, Ryan	1.00 has experi		0 ype of syst	em on other proje	0 \$0 ects of this nat	o \$0 ure.	\$0	0 100000 0 \$100,000	0 \$0	100000 \$100,000
Subtotal Sales Tax INEEUSubcontractorOverheads	0.00%					\$0 \$0 \$0	\$0 \$0 \$0	\$1 60,00 0 \$9,600 \$0	\$0	\$0 \$0 \$0	\$269,000 \$9,600 \$0
Subtotal Estimate Escalation Contingency						\$0 \$0	\$0 \$0	\$22,659 \$94,255		\$0 \$0	\$278,600 \$37,221 \$154,831
Total 4.2.15.01.03 EMISSIONSNOC MONITORIONG				0		\$0	\$0	\$286,513	\$184,139	\$0	\$470,652

Project Name: OU 7-70 Staged Interim Action
Stage III Project - Retrieval System Project - Option 2
Project Location: INEEL-RWMC
Estimate Number: 5974-2 Option 2-R

Client: S. L. Austad

Code Description	Contractor	_Qt	<u>v</u>	<u>UOM</u>	<u>Hrs</u>	Resource	<u>Labor</u>	Equipment	<u>Material</u>	Subcontractor	<u>Other</u>	TOTAL
4.2.15.01.04 HVAC - EQUIF	PMENT											
Memo: Costs for the	equipment are included in t	he procurementWB\$	S. The	sedetails on	ly include	installation lab	or.					
INSTALL-MISTELIM	PIPE INATOR	U.C.per EA	1.00	EA		<i>\$36.82</i> CN-SHEE	<i>3682</i> \$3.682	<i>1500</i> \$1,500	\$	o o o %0	0 \$0	<i>5182</i> \$5,182
INSTALL-DUST COL	PIPE LECTOR (55,000 CFM)	U.C. per EA	3.00	EA	<i>130</i> 390	<i>\$36.82</i> CN-SHEE	<i>4786.6</i> \$14.360	1500 \$4,500	\$6	o o \$0	0 \$0	<i>6286.6</i> \$18,860
INSTALL-BLOWER3	PIPE 300 HP (110,000 CFM)	U.C. per EA	2.00	EA	<i>150</i> 300	<i>\$36.82</i> CN-SHEE	<i>5523</i> \$11,046	1000 \$2,000	\$	o o 0 \$0	o \$0	<i>6523</i> \$13,046
INSTALL-BLOWER 1	PIPE 50 HP (37,000 CFM)	U.C. per EA	2.00	EA	100 200	<i>\$36.82</i> CN-SHEE	<i>3682</i> \$7,364	1000 \$2,000	\$0	o o so	o \$0	4682 \$9,364
INSTALL-VFD150 H	PIPE P FOR FAN MOTORS	U.C.per EA	2.00	EA	<i>77</i> 154	<i>\$36.82</i> CN-SHEE	<i>2835.14</i> \$5,670	0 \$0	\$0	o o \$0	0 \$0	<i>2835.14</i> \$5.670
INSTALL-VFD 300 HI	PIPE P FOR FAN MOTORS	U.C. per EA	2.00	EA	<i>85</i> 170	<i>\$36.82</i> CN-SHEE	<i>3 129.</i> 7 \$6,259	0 \$0	\$0	0 0 \$0	0 \$0	<i>3129.7</i> \$6,259
INSTALL-FITTRANS	PIPE MITTERS	U.C. per EA	4.00	EA		<i>\$36.82</i> CN-SHEE	<i>220.92</i> \$884	0 \$0	\$6	o o o \$0	0 \$0	<i>220.92</i> \$884
INSTALL-RFS PENTI	PIPE HOUSE (37,000 CFM)	U.C. per EA	1.00	EA		<i>\$36.82</i> CN-SHEE	2945.6 \$2,946	1000 \$1,000	\$0	0 0 \$0	0 \$0	<i>3945.6</i> \$3,946
INSTALL-HEPAHOU	PIPE ISINGS 3H X 5W	U.C. per EA	2.00	EA	<i>12</i> 0 240	<i>\$36.82</i> CN-SHEE	4418.4 \$8,837	1500 \$3,000	\$0	0 \$0	0 \$0	<i>5918.4</i> \$11,837
INSTALL-HEPAHOU	PIPE SINGS 4H X 6W	U.C. per EA	2.00	EA	<i>160</i> 320	<i>\$36.82</i> CN-SHEE	<i>5891.2</i> \$11,782	1500 \$3,000	\$6	o o \$0	0 \$0	7391.2 \$14,702
INSTALL-HEPAHOU	PIPE SINGS 3H X 6W	U.C. per EA	1.00	EA	140 140	<i>\$36.82</i> CN-SHEE	<i>5154.8</i> \$5,155	<i>1500</i> \$1,500	\$0 \$0	0 \$0	0 \$0	<i>6654.8</i> \$6,655
INSTALL-HEPAHOU	PIPE SINGS DON/DOFT AREAS	U.C. per EA	4.00	EA	<i>12</i> 48	<i>\$36.82</i> CN-SHEE	441.84 \$1,767	25 \$100	\$0		o \$0	<i>466.84</i> \$1,867

Project Name: OU 7-70 Staged Interim Action
Stage III Project - Retrieval System Project - Option 2
Project Location: INEEL-RWMC

Estimate Number: 5974-2 Option 2-R

S. L. Austad Client:

Prepared By: S.N. Wasley/R.D.Adams

Estimate Type: **Project Support**

Code Description Contractor	Qtv	<u>UOM</u>	<u>Hrs</u>	Resource	<u>Labor</u>	<u>Eauipment</u>	Material Su	ubcontractor	<u>Other</u>	TOTAL
4.2.15.01.04HVAC - EQUIPMENT										
Memo: Costs for the equipmentare included in	the procurement WBS.	These details or	nly include	installation lab	oor.					
PIPE INSTALL-PLC CONTROL UNITS	U.C.per EA	2.00 EA		\$36.82 CN-SHEE	220.92 \$442	\$0	<i>0</i> \$0	<i>o</i> \$0	<i>0</i> \$0	220.92 \$442
PIPE INSTALL-AIR COMPRESSOR (25HP)	U.C. per EA	1.00 EA	120 120	\$36.82 CN-SHEE	4418.4 \$4,41a	500 \$500	0 \$0	0 \$0	° \$0	4918.4 \$4,918
PIPE INSTALL-DESSICANT DRYER/FILTER	U.C.per EA	1.00 EA	60 60	\$36.82 CN-SHEE	2209.2 \$2,209	100 \$1 00	0 \$0	\$0	0 \$0	2309.2 \$2,309
PIPE INSTALL-72 DIA. DAMPERS (LEAK PROOF)	U.C. per EA	10.00 EA	40 400	\$36.82 CN-SHEE	1472.8 \$14,720	50 \$500	0 \$0	0 \$0	0 \$0	1522.8 \$1 5,228
Subtotal Sales Tax INEEL/Subcontractor Overheads	48.10%				\$1 01,550 \$0 \$48,849	\$19,700 \$0 \$9,476	\$0 \$0 \$0	\$0 \$0 \$0	\$0 \$0 \$0	\$121,250 \$0 \$58,326
Subtotal Estimate Escalation Contingency					\$20,093 \$83,584	\$3,898 \$1 6,215	\$0 \$0	\$0 \$0	\$0 \$0	\$179,575 \$23,991 \$99,798
Total 4.2.15.01.04 HVAC • EQUIPMENT			2,758		\$254,076	\$49,289	\$0	\$0	\$0	5303,365

4.2.15.01.05CHILLER PIPING & EQUIPMENT

Memo	: Costs for the equipmentare included in the	procurementWBS.	Thes	sedetails only	y Include i	installation la	bor with the exception	n of piping materia	als and insulation			
	PIPE INSTALL-I50 TON PACKAGED CHILLER	U.C.per EA	1.00	EA		\$39.33 CN-PIPE	3933 \$3,933	\$0	<i>0</i> \$0	\$0	0 \$0	3933 \$3,933
	PIPE INSTALL-250GALLON WATER TANK	U.C. per EA	1.00	EA		\$39.33 CN-PIPE	786.6 \$707	о \$0	<i>o</i> \$0	<i>0</i> \$0	<i>0</i> \$0	786.6 \$707
	PIPE INSTALL-BOILER/WATER HEATER 3,000 MBH	U.C. per EA	1.00	EA		\$39.33 CN-PIPE	4719.6 \$4,720	<i>0</i> \$0	<i>o</i> \$0	<i>0</i> \$0	<i>0</i> \$0	4719.6 \$4,720
	PIPE INSTALL-5 HP PUMP	U.C.per EA	3.00	EA		\$39.33 CN-PIPE	1258.56 \$3,776	<i>o</i> \$0	<i>o</i> \$0	<i>o</i> \$0	<i>o</i> \$0	125856 \$3,776

Project Name: OU 7-10 Staged Interim Action

Stage III Project - Retrieval System Project - Option 2
Project Location: INEEL-RWMC
Estimate Number: 5974-2 Option 2-R

S. L. Austad Client:

Code [<u>Description</u>	Contractor		Qtv	UOM	Hrs	Resource	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	TOTAL
4.2.15.01.0	05 CHILLER PIPING &	EQUIPMENT											
Memo:	Costs for the equi	ipmentare included in the	procurement	WBS. The	sedetails o	nly include	installation lab	or with the ex	ception of piping r	naterials and ii	nsulation.		
INS	STALL-25 HP PUMP	PIPE	U.C. per EA	1.00	EA		\$39.33 CN-PIPE	1691.19 \$1,691	° \$0		0 0 <i>\$0</i>	0 \$0	1691.19 \$1,691
INS	STALL-VFD FOR 5 HP	PIPE PUMP	U.C. per EA	1.00	EA	19.3 19	\$39.33 CN-PIPE	759.07 \$759	<i>o</i> \$0		0 0 80 \$0	0 \$0	759.07 \$759
INS	STALL-PLC CONTROLS	PIPE S UNITS	U.C. per EA	1.00	EA	6 6	\$39.33 CN-PIPE	235.98 \$236	° \$0		0 0 \$0	0 \$0	235.98 \$236
INS	STALL-3-WAY CONTRO	PIPE DL VALVES	U.C. per EA	5.00	EA	12 60	\$39.33 CN-PIPE	471.96 \$2,360	o \$0		0 0 0 \$0	0 \$0	471.96 \$2,360
INS	STALL-MANUALCONT	PIPE ROLS VALVES	U.C. per EA	28.00	EA		\$39.33 CN-PIPE	314.64 \$8,810	o \$0	\$	0 0 <i>\$0</i>	0 \$0	314.64 \$8.810
5 (CHILLER PIPING (INCL	PIPE LUDES HANGERS& FITTIN	<i>U.C. per LF</i> IGS)	2,000.00	LF		\$39.33 CN-PIPE	47.196 \$94,392	0 \$0	\$32,00	0 0 \$ <i>O</i>	0 \$0	63.196 \$126.392
2" (CONDENSATE DRAIN	PIPE PIPING	U.C. per LF	500.00	LF		\$39.33 CN-PIPE	31.464 \$15,732	0 \$0	\$4,00	8 0 0 \$0	0 \$0	39.464 \$19,732
5 F	PIPING INSULATION	PIPE	U.C. per LF	2,000.00	LF	0.7 1,400	\$39.33 CN-PIPE	27.531 \$55,062	° \$0	\$34,00	o 0 \$0	o \$0	44.531 \$89,062
INS	STALL-HEATINGCOIL	PIPE 300 MBH	U.C. per EA	2.00	EA	40 80	\$39.33 CN-PIPE	1573.2 \$3,146	o \$0	\$	o o so	o \$0	1573.2 \$3,146
INS	STALL-HEATING COIL 4	PIPE 420 MBH	U.C. per EA	1.00	EA	60 60	\$39.33 CN-PIPE	2359.8 \$2,360	o \$0	\$	0 0 \$0	0 \$0	2359 8 \$2,360

Project Name: OU 7-10 Staged Interim Action
Stage III Project - Retrieval System Project - Option 2
Project Location: INEEL-RWMC

Estimate Number: 5974-2 Option 2-R

S. L. Austad Client:

Prepared By: S.N. Wasley/R.D.Adams
Estimate Type: Project Support

	<u>Contractor</u>	<u>Qt</u>	<u>v</u> t	IOM H T	Resourc	e <u>Labor</u>	Eauipment	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	TOTAL
4.2.15.01.05 CHILLER PIPING &	<u>EQUIPMENT</u>										
Memo: Costs for the equip	oment are included in the pro	ocurement WB	S. Thesed	etails only incl	ude installation la	abor with the ex	ception of piping n	naterials and in	sulation.		
INSTALL-HEATING COIL 1		I.C. per EA	2.00 EA	A 1	80 \$39.33 60 CN-PIPE	3146.4 \$6,293	\$0	\$0	o o \$0	<i>o</i> \$0	3146.4 \$6,293
Subtotal Sales Tax INEEUSubcontractorOverheads	s 48.	.10%				\$204,056 \$0 \$98,159	\$0 \$0 \$0	\$70,000 \$4,200 \$35,693	\$0	\$0 \$0 \$0	\$274,056 \$4,200 \$133,852
Subtotal Estimate Escalation Continoencv						\$40,376 \$167.955	\$0 \$0	\$14.682 \$61.073		\$0 \$0	\$412,108 \$55,058 \$229.028
-Total 4.2.15.01.05 CHILLER P	IPING & EQUIPMENT			5,188		\$510,546	\$0	\$185,648	\$0	\$0	\$696,193
	raio ozwi roject docign, do	surie tre same	e type syste	em and covera	ge will be require	ed for this facility	/ .				
Subtotal	, ,	.C. perSF	400.00 S F		ge will be require	\$0 \$0 \$0	0 \$0 \$0	\$0	\$558,960	\$0 \$0	34 \$558,960 \$558,960
	ROLS (FACILITY FOOT PRIN	.C. perSF	,, ,			0 \$0	0 \$0	\$0	\$558,960 \$558,960 \$0 \$0	\$0	\$558,960
Subtotal Sales Tax	ROLS (FACILITY FOOT PRIN	. <i>C. per SF</i> T) 164,	,, ,			\$0 \$0 \$0 \$0	\$0 \$0 \$0 \$0	\$0 \$0 \$0	\$558,960 \$558,960 \$0 \$0 \$70 \$74,677	\$0 \$0 \$0	\$558,960 \$558,960 \$0
Subtotal Sales Tax INEEUSubcontractorOverheads Subtotal Estimate Escalation	ROLS (FACILITY FOOT PRIN	. <i>C. per SF</i> T) 164,	,, ,			\$0 \$0 \$0 \$0 \$0 \$0	\$0 \$0 \$0 \$0 \$0	\$0 \$0 \$0 \$0	\$558,960 \$558,960 \$0 \$0 \$0 \$74,677 \$310,640	\$0 \$0 \$0 \$0	\$558,960 \$558,960 \$0 \$558,960 \$74,677

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Project Name: OU 7-70 Staged Interim Action
Stage III Project - Retrieval System Project - Option 2
Project Location: INEEL-RWMC

Estimate Number: 5974-2 Option 2-R

S. L. Austad Client:

Prepared By: S.N. Wasley/R.D. Adams

Code D	<u>Description</u>	Contractor	Qtv	<u>UOM</u>	<u>Hrs</u>	Resource	<u>Labor</u> <u>E</u>	<u>Equipment</u>	<u>Material</u>	Subcontractor	<u>Other</u>	TOTAL
4.2.15.02.0	2 RFS DRY PIPE FIRE	<u>PROTECTION</u>										
Memo:		contacting a local fire protection at the INEEL, as well as the GEM		s provided ı	many hours	s of time as a co	nsultant for the	INEEL. This con	npany has also d	design and installed	many fire	
FEE	ED MAINS	U.C. per		LS	0		o \$0	o \$0	o \$0	8000 \$16,000	o \$0	8000 \$16,000
Subtotal Sales Ta INEEL/Si		s 0.00%					\$0 \$0 \$0	\$0 <i>\$0</i> <i>\$0</i>	\$0 <i>\$0</i> \$0	\$808,050 \$0 \$0	\$0 \$0 \$0	\$808,050 \$0 \$0
Subtota Escalation Continae							\$0 \$0	\$0 \$0	\$0 \$0	\$107,955 \$449 .071	\$0 <i>\$0</i>	\$808,050 \$107,955 \$449.071
—Total 4.	2.15.02.02 RFS DRY PI	PE FIRE PROTECTION			0		\$0	\$0	\$0	\$1,365,077	\$0	\$1,365,077
4.2.15.02.0	14 RFS EXTRA HAZARI	D FOAM SYSTEM										
Memo:		contacting a local fire protection at the INEEL, as well as the GEM		s provided r	nany hours	of time as a co	nsultant for the I	INEEL. This com	pany has also d	lesign and installed i	many fire	
EXT	RA HAZARD FOAM SY	U.C. per STEM (EQIPMENT ONLY)	<i>1.</i> 00	LS	0		0 \$0	0 \$0	o \$0	100000 \$100,000	0 \$0	100000 \$100,000
EXT	RA HAZARD FOAM PIF	U.C. per PING DISTRIBUTION SYSTEM	SF 90,000.00	SF	0		<i>o</i> \$0	<i>o</i> \$0	o <i>\$</i> 0	<i>4.35</i> \$391,500	0 \$0	<i>4.35</i> \$391,500

Project Name: OU 7-10 Staged Interim Action

Stage 111 Project - Retrieval System Project - Option 2

Project Location: INEEL-RWMC
Estimate Number:5974-2 Option 2-R

Client: S. L. Austad

Prepared By: S.N. Wasley/R.D.Adams

Code Description Contractor	Qtv UC	NT Hrs	Resource Labor	<u>Eauipment</u>	<u>Material</u>	Subcontractor	<u>Other</u>	<u>TOTAL</u>
4.2.15.02.04 RFS EXTRA HAZARD FOAM SYSTEM								
Memo: Costs are based on contacting a local fire protection v protection systems at the INEEL, as well as the GEM.		ided many hours	of time as a consultant for t	he INEEL. This coi	mpany has also	design and installed	many fire	
U.C. per E EXTRA HAZARD FOAM MONITOR NOZZLES	10.00 EA	0	o \$0	0 \$0	\$6	10000 3 \$100,000	0 \$0	10000 \$100,000
Subtotal Sales Tax INEEL/Subcontractor Overheads 0.00%			\$0 \$0 \$0	\$0 \$0 \$0	\$0 \$0 \$0	\$0	\$0 \$0 \$0	\$591,500 \$0 \$0
Subtotal Estimate Escalation Contingency			\$0 \$0	\$0 \$0	\$ 0 \$0		\$0 \$0	\$591,500 \$79,024 \$328,724
—Total 4.2.15.02.04 RFS EXTRA HAZARD FOAM SYSTEM		0	\$0	\$0	\$(\$999,249	\$0	\$999,249
4.2.15.02.05 MAIN SUPPORT BUILDING DRY PIPE SYSTEM Memo: Costs are based on contacting a local fire protection v protection systems at the INEEL, as well as the GEMp		ded many hours	of time as a consultant for th	ne INEEL. This cor	mpany has also	design and installed	many fire	
U.C. par MAIN SUPPORT BUILDING STRUCTURE-DRY PIPE FIRE	31,200.00	o	0 \$0	0 <i>\$0</i>	\$0		o \$0	3.65 \$1 13,880
PROTECTION								
U.C. per L MAIN SUPPORT BUILDING- FEED MAINS	1.00 LS	0	o \$0	° \$0	\$6		0 \$0	3000 \$3,000
Subtotal			\$0	\$0	\$0		\$0	\$116,880
Sales Tax INEEL/Subcontractor Overheads 0.00%			\$0 \$0	\$0 \$0	\$0 \$0	•	\$0 \$0	\$0 \$0
Subtotal Estimate Escalation Contingency			\$0 \$0	\$0 \$ 0	\$C \$C		\$0 \$0	\$116,880 \$15,615 \$64,956
Total 4.2.15.02.05 MAIN SUPPORT BUILDING DRY PIPE SYSTEM		0	\$0	\$0	\$0	\$197,451	\$0	\$197,451

Project Name: OU 7-10 Staged Interim Action

Stage III Project - Retrieval System Project - Option 2

Project Location: INEEL-RWMC
Estimate Number: 5974-2 Option 2-R

Client: S. L Austad

Prepared By: S.N. Wasley/R.D.Adams

Estimate Type: **Project Support**

Code	Description	Contractor	_	Qtv	UOM 	Hrs	Resource	<u>Labor</u>	<u>Eauipment</u>	<u>Materia</u> l	Subcontractor	<u>Other</u>	TOTAL
4.2.15.02	2.06 ADDITIONAL MAII	N SUPPORT BUILDING FIRE	PROTECTIO	NSYSTEM	<u>1S</u>								
Memo:	Costs are based protection system	on contactinga local fire pr ns at the INEEL, as well as	otection vend the GEM proje	or that has ct.	provided ma	any hours (of time as a co	nsultant for t	he INEEL. This co	mpany has als	o design and installed	many fire	
	AINTENCE BAY GLOV ROTECTION	E BOX AREA-DRY PIPE FIR	<i>U.C. perSF</i> E	1,400.00	SF	0		o \$0	°0 \$0		0 4.35 00 \$6,090	0 \$0	<i>4.3</i> 5 \$6,090
	VAC ROOM HVAC CONFINEMENT	AREA, 50% OF HVAC ARE	<i>U.C. perSF</i> A, REQUIRES	6,500.00 INDEPEND	SF DENT FIRE P	0 ROTECTIC	DN.	0 \$0	° \$0		0 4.35 60 \$28,275	\$0 \$0	4.35 \$28,275
W	ASH BAY FIRE PROTE	ECTION	U.C. perSF	850.00	SF	0		o \$0	0 \$0		0 4.35 0 \$3,698	<i>o</i> \$0	<i>4.35</i> \$3.698
Pl	ERSONNELAIRLOCK /	AREA FIRE PROTECTION	U.C. perSF	850.00	SF	0		0 \$0	0 \$0		0 4.35 0 \$3,698	<i>o</i> \$0	<i>4.35</i> \$3,698
CI	LEAN AIRLOCK AREA	FIRE PROTECTION	U.C. perSF	730.00	SF	0		0 \$0	0 \$0	\$	0 4.35 0 \$3,176	0 \$0	<i>4.3</i> 5 \$3,176
Subto Sales INEEL		ds	0.00%					\$0 \$0 \$0	\$0 \$0 \$0	\$ \$		\$0 \$0 \$0	\$44,936 \$0 \$0
Subto Escala Contin								\$0 \$0	\$0 \$0	\$		\$0 \$0	\$44,936 \$6,003 \$24,973
	4.2.15.02.06 ADDITION PROTECTIONSYSTEM	IAL MAIN SUPPORT BUILD MS	ING FIRE			0		\$0	\$0	\$	0 \$75,912	\$0	\$75,912
4.2.15.02	.07 AIRLOCK TO CHAI	RACTERIZATION FIRE PRO	TECTION										

AIRLOCK TO CHARACTERIZATION-DRY PIPE FIRE PROTECTION

protection systems at the INEEL, as well as the GEM project.

Memo: Two dry pipe systems are required. One system will cover the area between the fabric outer structure and the liner, the other system will cover the area within the liner.

8,400.00 SF

U.C. per SF

Memo:

\$30,660

0

\$0

0

\$0

Costs are based on contacting a local fire protection vendor that has provided many hours of time as a consultant for the INEEL. This company has also design and installed many fire

0

PageNo.

3.65

\$30.660

Project Name: OU 7-70 Staged Interim Action

Stage III Project - Retrieval System Project - Option 2
Project Location: INEEL-RWMC

Estimate Number: 5974-2 Option 2-R

S. L. Austad Client:

Prepared By: S.N. Wasley/R.D.Adams

Code Description Contractor	Qtv 1	MOU F	irs	Resource	Labor	Eauipment	<u>Material</u>	Subcontractor	<u>Other</u>	TOTAL
4.2.15.02.0 AIRLOCK TO CHARACTERIZATION FIRE PROTECTION										
Memo: Costs are based on contacting a local fire protection very protection systems at the INEEL, as well as the GEM pr		rovided many	hours	of time as a co	nsultant for th	ne INEEL. This con	npany has also	o design and installed	many fire	
Subtotal					\$0	\$0	\$		\$0	\$30,660
Sales Tax INEEUSubcontractorOverheads 0.00%					\$0 \$0	\$0 \$0	\$	0 \$0 o \$0	\$0 \$0	\$0 \$0
					Ψ0	Ψ0	۶	0 40	ΨΟ	
Subtotal Estimate Escalation					\$0	\$0	\$	0 \$4,096	\$0	\$3 0,6 60 \$4,096
Contingency					\$0	\$0	\$	0 \$17,039	\$0	\$17,039
Total 4.2.15.02.07AIRLOCKTO CHARACTERIZATIONFIRE		0)		\$0	\$0	\$	0 \$51,795	\$0	\$51,795
PROTECTION										
4.2.15.03PLANTAIR Memo: Costs are based on the GEM Project design, assume th WBS.	e same type sys	tem and cove	rage w	vill be required i	for this facility	/. Equipmentcost	for the compr	essor is located in the	procurement	
U.C. per SF RFS PLANTAIR DISTRIBUTION SYSTEM	127,000.00 S	F	0		<i>0</i> \$0	° \$0	\$	0 2.04 0 \$259,080	° \$0	2.04 \$259,080
U.C. per SF					0	o		0 2.04	0	2.04
MAIN SUPPORT BUILDING (ALL AREAS)	31,200.00 S	F	0		\$0	\$0	\$	0 \$63,648	\$0	\$63,648
Subtotal					\$0	\$0	\$	0 \$322,728	\$0	9322,728
Sales Tax					\$0	\$0	\$		\$0	\$0
INEEUSubcontractorOverheads 0.00%					\$0	\$0	\$	0 \$0	\$0	\$0
Subtotal Estimate Escalation					¢ 0	\$0	¢.	0 842.116	do	\$322,728
Contingency					\$0 \$0	\$0 \$0	\$\ \$\		\$0 \$0	\$43,116 \$179,355
Total 4.2.15.03PLANT AIR		0			\$0	\$0	\$	0 \$545,199	\$0	\$545,199

OU 7-10 Staged Interim Action Proiect Name:

Stage III Project - Retrieval System Project - Option 2

Project Location: INEEL-RWMC Estimate Number: 5974-2 Option2-R Client:

S. I. Austad Prepared By: S.N. Wasley/R.D.Adams

Estimate Type: **Project Support**

Code Description Contractor		Qtv	UOM	<u>Hrs</u>	Resource	Labor	Eauipment	Material	Subcontractor	<u>Other</u>	TOTAL
4.2.15.04 BREATHING AIR											
Memo: Costs are based on the GEM Project desi assume provided to the project by the BE	gn, assume the I WI equipment	same type s pool at no co	system and ost to this	d coverage w project.	vill be required	for this facility	y. No costs for the	breathing air	compressor have beer	n included,	
BREATHING AIR DISTRIBUTIONSYSTEM Memo, Assume 50% less piping due to large open area v	U.C. per SF vithin the RFS.	90,000.00	SF	0		o \$0	o \$0	\$	o 5.6 0 \$504,000	o \$0	5.6 \$504,000
MAINTENANCE BAY GLOVE BOX - BREATHING DISTRIBUTION SYSTEM	<i>U.C. per SF</i> AIR	1,400.00	SF	0		o \$0	° \$0		0 11.2 50 \$15,680	o \$0	11.2 \$1 5,680
HVAC ROOM BREATHING AIR DISTRIBUTION S	U.C. per SF YSTEM	6,500.00	SF	0		o \$0	o \$0	\$	0 11.2 0 \$72,800	<i>o</i> \$0	11.2 \$72,800
PERSONNEL AIRLOCK	U.C. per SF	850.00	SF	0		o \$0	°0 \$0		o 11.2 60 \$9,520	0 \$0	11.2 \$9,520
CLEAN TRANSFER AIRLOCK	U.C. perSF	730.00	SF	0		o \$0	° \$0		0 11.2 60 \$8,176	° \$0	11.2 \$8.176
WASH BAY AIRLOCK	U.C. per SF	850.00	SF	0		0 \$0	0 \$0		0 11.2 00 \$9,520	0 50	11 <i>2</i> \$9,520
Subtotal Sales Tax INEEUSubcontractorOverheads	0.00%					\$0 \$0 \$0	\$0 \$ 0 \$0	\$ \$ \$		\$0 \$0 \$0	\$619,696 \$0 \$0
Subtotal Estimate Escalation Contingency						\$0 \$0	\$0 \$0	\$	0 \$82,791 0 \$344,394	\$0 \$0	\$619,696 \$82.791 \$344,394
—Total 4.2.15.04 BREATHING AIR				0		\$0	\$0	\$	0 \$1,046,881	\$0	\$1,046,881

Memo:

U.C. per EA DUST SUPPRESSION SYSTEM (3 COMPLETE SYSTEM)

3.00 EA

\$0

\$0

92242 \$276,726

\$0

0

92242 \$276,726

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INEEL

Estimating Services Department

Costs are based on the GEM project. Assume this facility will require three complete GEM facility systems. This is based on the area of the dig face in relation to the dig area of the GEM

4.2.15.05 DUST SUPPRESSION

Project Name: OU 7-70 Staged Interim Action
Stage III Project - Retrieval System Project - Option 2
Project Location: INEEL-RWMC
Estimate Number: 5974-2 Option 2-R

S. L. Austad Client:

Prepared By: S.N. Wasley/R.D.Adams

Code Description Contractor	Qt	tv <u>UOM</u>	<u>Hrs</u> R	esource <u>Labor</u>	Eauipment	Material S	ubcontractor	<u>Other</u>	TOTAL
4.2.15.05 DUST SUPPRESSION									
Memo: Costs are based on the GEM project. Assu project.	ıme this facility wi	II require three co	omplete GEM fac	ility systems. This is bas	ed on the area of th	ne dig face in relat	tion to the dig area	of the GEM	
Subtotal Sales Tax				\$0 \$0	\$0 \$0	\$0 \$0	\$276,726 \$0	\$0 \$0	\$276,726 \$0
INEEUSubcontractor Overheads	0.00%			\$0	\$0 \$0	\$0	\$0	\$0	\$0
Subtotal Estimate Escalation Contingency				\$0 \$0	\$0 \$0	\$0 \$0	\$36,971 \$153,790	\$0 \$0	\$276,726 \$36,971 \$153,790
Total 4.2.15.05 DUST SUPPRESSION			0	\$0	\$0	\$0	\$467,486	\$0	\$467,486
4.2.15.06 MISC. MECHANICAL									
MAINT. GLOVE BOX GLOVE PORTS-OVALS	U.C. per EA	25.00 EA	0	0 \$0	° \$0	o \$0	8000 \$200,000	o \$0	8000 \$200.000
MAINT. GLOVE BOX SAMPLE BAG-OUTS	U.C.per EA	4.00 EA	0	o \$0	0 \$0	o \$0	10000 \$40,000	0 \$0	10000 \$40,000
MAINT. GLOVE BOX SAMPLE CANS	U.C. per EA	4.00 EA	0	° \$0	o \$0	o \$0	5000 \$20,000	o \$0	5000 \$20,000
MAINT. GLOVE BOX BAG-OUT PORTS	U.C. per EA	4.00 EA	0	o \$0	o \$0	o \$0	6400 \$25,600	<i>o</i> \$0	6400 \$25,600
MAINT. GLOVE BOX HOIST LOAD CELL	U.C.per EA	1.00 EA	0	o \$0	0 \$0	o \$0	<i>1500</i> \$1,500	0 \$0	1500 \$1,500
MAINT. GLOVE BOX PORTABLE DECON VAC	U.C.per EA	1.00 EA	0	o \$0	0 \$0	0 \$0	<i>2000</i> \$2,000	0 \$0	2000 \$2,000
MAINT. GLOVE BOX ALLOWANCE FOR REMOTE I	<i>U.C.per LS</i> MAINTENTANCE	1.00 LS	0	o \$0	o \$0	0 \$0	<i>50000</i> \$50,000	o \$0	50000 \$50,000

Project Name: OU 7-70 Staged Interim Action
Stage III Project - Retrieval System Project - Option 2
Project Location: INEEL-RWMC

Estimate Number: 5974-2 Option 2-R

Client: S. L. Austad

Code Description	Contractor	Qtv	UOM	<u>Hrs</u>	Resource	<u>Labor</u>	Eauipment	<u>Material</u>	Subcontractor	<u>Other</u>	TOTAL
4.2.15.06 MISC. MECHANICAL											
WASH BAY PIPING ALLOV	PIPE U.C. per WANCE	L F 640.00	LF		\$39.33 CN-PIPE	7.158 \$4,581	<i>o</i> \$0	32. \$20,928		0 \$0	39.858 \$25,509
HVAC ROOM MISC. PIPIN	PIPE U.C.per G ALLOWANCE	_F 9,700.00	LF		\$39.33 CN-PIPE	7.158 \$69,433	<i>o</i> \$0	<i>32.</i> \$317,190		0 \$0	39.858 \$386,623
Subtotal Sales Tax INEEUSubcontractorOverheads	s 26.96%					\$74,014 \$0 \$35,604	\$0 \$0 \$0	\$338,118 \$20,28 \$172,40	7 \$0	\$0 \$0 \$0	\$751,232 \$20,287 \$208,011
Subtotal Estimate Escalation Contingency						\$14,645 \$60,920	\$0 \$0	\$70,917 \$294,997		\$0 \$0	\$979,530 \$130.865 \$544,371
Total 4.2.15.06 MISC. MECHA	NICAL			1,882		\$185,183	\$0	\$896,726	\$572,857	\$0	\$1,654,767
4.2.16.01 GENERAL FACILITIES	ELECTRICAL										
Memo: Costs are based or	the GEM project calculated squar	e footage.									
FACILITY RACEWAYS	U.C. per d	5F 158,200.00	SF	0		o \$0	o \$0	\$6) 17) \$2,689,400	<i>0</i> \$0	17 \$2,689,400
FACILITY WIRE & CABLE	U.C.per	5F 158,200.00	SF	0		o \$0	° \$0	\$0	6.36 3 \$1,006,152	0 \$0	6.36 \$1,006,152
FACILITY LIGHTING	U.C. per	SF 158,200.00	SF	0		0 \$0	o \$0	\$0	8.75 3 \$1,384,250	0 \$0	8.75 \$1,384,250

Project Name: **OU** 7-10 **Staged Interim Action**

Stage III Project - Retrieval System Project - Option 2

Project Location: /NEEL-RWMC Estimate Number: 5974-2 Option 2-R Client: S. L. Austad

Prepared By: S.N. Wasley/R.D.Adams
Estimate Type: Project Support

Qtv ШОМ Hrs- Resource Labor Equipment Material Subcontractor Other TOTAL Code Description Contractor 421 6.01 GENERAL FACILITIES ELECTRICAL Costs are based on the GEM project calculated square footage. Memo: U.C. per SF 0 0 5.45 0 5.45 \$0 FACILITY MISC. (TELEPHONE, LIGHTNING PROTECTION, 0 \$0 \$0 \$862,190 \$0 \$862,190 158,200,00 SF ETC.) \$0 \$0 \$0 \$0 \$5,941,992 Subtotal \$5,941,992 \$0 \$0 \$0 \$0 \$0 \$0 Sales Tax 0.00% \$0 \$0 \$0 \$0 \$0 \$0 **INEEUSubcontractorOverheads** Subtotal Estimate \$5,941,992 \$0 \$0 \$0 \$0 \$793,850 Escalation \$793.850 \$0 \$0 \$0 Contingency \$0 \$3,302,184 \$3,302,184 -Total 4.2.16.01 GENERAL FACILITIES ELECTRICAL 0 \$0 \$0 \$0 \$10,038,027 \$0 \$10,038,027 4.2.16.02.01 MAIN FEED CONDUITS AND CONDUCTORS 0 33.589 **ELEC** 0.1 \$35.89 3.589 0 30 0 U.C. per LF \$0 500 MCM, 5 kV 3-CONDUCTOR MINING POWER CABLE 400.00 LF **CN-ELEC** \$12,000 \$0 \$0 \$13,436 \$1,436 22.621 2.871 0 19.75 0 0 ELEC U.C. per LF 0.08 \$35.89 400.00 LF 32 **CN-ELEC** \$1,148 \$0 \$7,900 \$0 \$0 \$9,048 250 MCM, 5 kV 3-CONDUCTOR MINING POWER CABLE 0 203.56 0 0 **ELEC** U.C. per EA \$35.89 143.56 60 \$0 \$360 \$0 \$1,221 500 MCM 5 kV TERMIANTION KITS 6.00 EA 24 **CN-ELEC** \$861 \$0 188.56 \$35.89 143.56 45 0 0 U.C.per EA \$0 \$270 \$0 \$1,131 250 MCM 5 kV TERMIANTION KITS 6.00 EA 24 **CN-ELEC** \$861 \$0 0 143.56 **ELEC** U.C. per EA \$35.89 143.56 0 0 0 \$0 \$861 HI-POT TESTING 6.00 EA **CN-ELEC** \$861 \$0 \$0 \$0 1.938 **ELEC** 0.054 \$35.89 1.938 0 0 0 0 U.C. per LF 500 MCMTHHN 600 VOLT COPPER WIRE 3.600.00 LF 194 **CN-ELEC** \$6,977 \$0 \$0 \$0 \$0 \$6,977

09/25/2003

Memo: Assume main switchgear is located within 100 feet of the power transformers.

Project Name: OU 7-10 Staged Interim Action
Stage III Project - Retrieval System Project - Option 2

Project Location: INEEL-RWMC Estimate Number: 5974-2 Option 2-R

S. L. Austad Client:

Prepared By: S.N. Wasley/R.D.Adams

Code Description	Contractor		Qtv	UOM 	Hrs	Resource	<u>Labor</u>	<u>Eauipment</u>	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	TOTAL
4.2.16.02.01 MAIN FEED CONDU	ITS AND CONDUCTORS											
5 EMT CONDUIT WITH FI		<i>U.C. per</i> LF	1,600.00	LF		\$35.89 CN-ELEC	10.767 \$17,227	o \$0	\$0	o \$0	o \$0	10.76 7 \$17,227
Subtotal Sales Tax INEEUSubcontractor Overheads	s 4	8.10%					\$29,372 \$0 \$14,129	\$0 \$0 \$0	\$20,530 \$1,232 \$10,468	2 \$0	\$0 \$0 \$0	\$49,902 \$1,232 \$24,598
Subtotal Estimate Escalation Contingency							\$5.812 \$24,175	\$0 \$0	\$4,306 \$17,911		\$0 \$ 0	\$75,732 \$10,118 \$42,087
Total 4.2.16.02.01 MAIN FEED	CONDUITS AND CONDUC	CTORS			818		\$73,489	\$0	\$54,447	\$0	\$0	\$127,936
4.2.16.02.02 TRANSFORMERS 1000 kVA 4160-480 DIST. The Memo: Transformer pricing is based on the pricing in the pricing is based on the pricing in the pricing in the pricing is based on the pricing in	RANSFORMER, S-XFR-1	U.Cper EA	1.00	EA		\$35.89 CN-ELEC	2727.64 \$2,728	1500 \$1,500	1680 \$16,800		o \$0	2 1027.64 \$21,028
2000 kVA 4160-480 DIST. T Memo: Transformer pricing is bas	RANSFORMER, N-XFR-1	U.C. per EA	1.00	EA	1 00 100	\$35.89 CN-ELEC	3589 \$3,589	1500 \$1,500	2520 0 \$25,200		0 \$0	30289 \$30.289
Subtotal Sales Tax INEEUSubcontractorOverheads	s 4:	8.10%					\$6,317 \$0 \$3,039	\$3,000 \$0 \$1,443	\$42,000 \$2,520 \$21,416	\$0	\$0 \$0 \$0	\$51, 3 17 \$2,520 \$25,898
Subtotal Estimate Escalation Contingency							\$1,250 \$5,199	\$594 \$2,469	\$8,809 \$36,643		\$0 \$0	879,734 \$10,652 \$44,311
-Total 4.2.16.02.02 TRANSFOR	MERS				176		\$15,804	\$7,506	\$111,388	\$0	\$0	\$134,698

Project Name: OU 7-70 Staged Interim Action
Stage III Project - Retrieval System Project - Option 2
Project Location: INSEL-RWMC

Estimate Number: 5974-2 Option 2-R

S. L. Austad Client:

Prepared By: S.N. Wasley/R.D.Adams

Code <u>Description</u>	Contractor		Qtv	<u>UOM</u>	<u>Hrs</u>	Resource	<u>Labor</u>	Equipment	<u>Material</u>	Subcontractor	Other	TOTAL
4.2.1 6.02.03 SITEWORK												
ALLOWANCE FOR TRAIN	ELEC NSFOMER PADS	U.C. per EA	2.00	EA	0		o \$0	o \$0	\$	0 10000 0 \$20,000	° \$0	10000 \$20,000
Subtotal Sales Tax INEEUSubcontractorOverhea	ds	48.10%					\$0 \$0 \$0	\$0 \$0 \$0	\$6 \$ \$	0 \$0	\$0 \$0 \$0	\$20,000 \$0 \$9,621
Subtotal Estimate Escalation Contingency							\$0 \$0	\$0 \$0	\$\ \$\		\$0 \$0	\$29,621 \$3,957 \$16,461
-Total 4.2.16.02.03 SITEWOR	κ				0		\$0	\$0	\$	\$50,040	SO	\$50,040
4.2.16.02.04 SWITCHGEAR												
S-MCC-I, 2000 AMP MAI	ELEC N ,2771408VOLT	U.C.per EA	1.00	EA		\$35.89 CN-ELEC	4306.8 \$4,307	1500 \$1,500	3552 \$35,525		o \$0	41331.8 \$41,332
MCC-I, 4000 AMP MAIN	ELEC ,2771408 VOLT	U.C. per EA	1.00	EA		\$35.89 CN-ELEC	5742.4 \$5,742	1500 \$1,500	4652 \$46,52		0 \$0	53767.4 \$53,767
S-PP-1, 600 AMP 2771480	ELEC PANEL	U.C. per EA	1.00	EA		\$35.89 CN-ELEC	574.24 \$574	0 \$0	337 \$3,375		o \$0	3949.24 \$3,949
s-PP-2, 100 AMP 2771480	ELEC) PANEL	U.C.per EA	1.00	EA		\$35.89 CN-ELEC	287.12 \$287	o \$0	169 \$1,690		0 \$0	1977.12 \$1,977
N-PP-I, 600 AMP 2771480	ELEC PANEL	U.C. per EA	1.00	EA		\$35.89 CN-ELEC	574.24 \$574	o \$0	337 : \$3,37		o \$0	3949.24 \$3,949
L-LP-I. 600 AMP 2771480	ELEC PANEL	U.C.per EA	1.00	EA	16 16	\$35.89 CN-ELEC	574.24 \$574	o \$0	337 5 \$3,375		o \$0	3949.24 \$3,949
225 AMP 2771480 LIGHTI	ELEC NG, HEAT, AND POWER	<i>U.C. per EA</i> PANELS	12.00	EA	8 96	\$35.89 CN-ELEC	287.12 \$3.445	0 \$0	245 \$29,400		0 \$0	2737.12 \$32,845

Project Name: OU 7-70 Staged Interim Action Stage III Project - Retrieval System Project - Option 2 Project Location: INEEL-RWMC Estimate Number: 5974-2 Option 2-R

Client: S. L. Austad

Code Description	Contractor	_	Qtv	UOM	Hrs	Resource	<u>Labor</u>	Equipment	<u>Material</u>	<u>Subcontractor</u>	<u>Other</u>	TOTAL
4.2.16.02.04 SWITCHGEAR												
ALOWANCE FOR DISCO	ELEC NNECT SWITCHES	U.C. per LS	1.00	LS	80 80		2871.2 \$2,871	o \$0	5000 \$5,00		o \$0	7871 2 \$7,871
Subtotal Sales Tax INEEUSubcontractorOverhead	ds	48.10%					\$18,376 \$0 \$8,839	\$3,000 \$0 \$1,443	\$128,265 \$7,696 \$65,403	\$0	\$0 \$0 \$0	\$149,641 \$7,696 \$75,685
Subtotal Estimate Escalation Contingency							\$3,636 \$15,124	\$594 \$2,469	\$26,902 \$111,905		\$0 \$0	\$233,022 \$31,132 \$129,499
Total 4.2.16.02.04 SWITCHGI	EAR				512		\$45,976	\$7,506	\$340,171	\$0	\$0	\$393,652
4.2.16.02.05MISC. CONNECTIO	<u>NS</u>											
5 HP MOTOR CONNECTI	ELEC ON	U.C. per EA	3.00	EA		\$35.89 CN-ELEC	71.78 \$21 5	\$0 \$0	50 \$1 <i>50</i>		° \$0	121.78 \$365
25 HP MOTOR CONNECT	ELEC	U.C. per EA	2.00	EA		\$35.89 CN-ELEC	107.67 \$21 5	<i>0</i> \$0	125 \$250		° \$0	232.67 \$465
50 HP MOTOR CONNECT	ELEC	U.C. per EA	1.00	EA		\$35.89 CN-ELEC	1 43.56 \$144	<i>o</i> \$0	250 \$250		0 \$0	393.56 \$394
150 HP MOTOR CONNEC	ELEC TION	U.C.per EA	2.00	EA		\$35.89 CN-ELEC	179.45 \$359	<i>o</i> \$0	400 \$800		o \$0	579.45 \$1,159
300 HP MOTOR CONNEC	ELEC TION	U.C. Der EA	2.00	EA		\$35.89 CN-ELEC	287.12 \$574	o \$0	600 \$1,200		o \$0	887.12 \$1,774

Project Name:

OU 7-10 Staged Interim Action
Stage III Project - Retrieval System Project - Option 2

Project Location: /NEEL-RWMC Estimate Number: 5974-2 Option 2-R

Client: S. L. Austad

Code DescriDtion	Contractor		Qtv	<u>UOM</u>	Hrs	Resource	<u>Labor</u>	<u>Eauiument</u>	<u>Material</u>	Subcontractor	<u>Other</u>	TOTAL
4.2.16.02.05 MISC. CONNECTI	<u>IONS</u>											
CHILLER	ELEC	U.C.per EA	1.00	EA		\$35.89 CN-ELEC	287.12 \$287	0 \$0	20 \$20		o \$0	487.72 \$487
Subtotal Sales Tax INEEUSubcontractor Overhe	ads	48.10%					\$1,795 \$0 \$863	\$0 \$0 \$0	\$2,850 \$17 ⁻ \$1,453	1 \$0	\$0 \$0 \$0	\$4,645 \$171 \$2,316
Subtotal Estimate Escalation Contingency							\$355 \$1,477	\$0 \$0	\$59 \$2,486	8 \$0 6 \$0	\$0 \$0	\$7,132 \$953 \$3,963
—Total 4.2.16.02.05 MISC. CO	ONNECTIONS				50		\$4,490	\$0	\$7,558	8 \$0	\$0	\$12,048
ALLOWANCE FOR TES Subtotal Sales Tax INEEUSubcontractor Overhea		U.C. perLS DEQUIPMENT 48.10%	1.00	LS		\$35.89 CN-ELEC	\$613.6 \$8,614 \$8,614 \$0 \$4,143	\$0 \$0 \$0 \$0 \$0	\$(\$(\$(\$(0 \$0 0 \$0	\$0 \$0 \$0 \$0 \$0 \$0	\$8613.6 \$8,614 \$8,614 \$0 \$4,143
Subtotal Estimate Escalation Contingency							\$1,704 \$7,090	\$0 \$0	\$0 \$0		\$0 \$0	\$12,757 \$1,704 \$7,090
-Total 4.2.16.02.06 TESTING	;				240		\$21,551	\$0	\$0	\$0	\$0	\$21,551
4.2.16.03 MONITORINGAND C Memo: Unit costs are ba	CONTROLS Assed on the GEM project	t calculated squa	re footage. T	This unit co	stalso inc	luded HVAC co	ontrols.					
MONITORING AND CON THE GEM PROJECTSF		<i>U.C. per SF</i> ATION (BASED 01	458,200.00	SF	0		0 \$0	o \$0	\$6	o 5.9 0 \$933,380	o \$0	<i>5.9</i> \$933,380

OU 7-70 Staged Interim Action Project Name:

Stage III Project - Retrieval System Project - Option 2
Project Location: INEEL-RWMC

Estimate Number: 5974-2 Option 2-R

S. L. Austad Client:

Prepared By: S.N. Wasley/R.D.Adams

Code <u>Description</u>	Contractor	Qty	<u>UOM</u>	Hrs	Resource	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	Subcontractor	<u>Other</u>	TOTAL
4.2.16.03 MONITORINGAND C	CONTROLS										
Memo: Unit costs are ba	ased on the GEM project calculated sq	uare footage.	This unit cos	stalso inc	luded HVAC co	ntrols.					
PROJECT SF)	U.C. per S. NTROLS-CABLES (BASED ON THE GE ad down by 50% from the GEM project du	M 158,200.00		0		<i>0</i> \$0	° \$0	\$	o 1.5 0 \$237,300	<i>o</i> \$0	1.5 \$237,300
GEM PROJECTSF)	U.C. per S NTROLS-RACEWAYS (BASED ON THE ed down by 50% from the GEM project du	158,200.00		0		<i>0</i> \$0	\$0 \$0	ş	0 1.45 0 \$229,390	<i>o</i> \$0	1.45 \$229,390
Subtotal Sales Tax INEEL/Subcontractor Overhea	ads 0.00%					\$0 \$0 \$0	\$0 \$0 \$0	\$ \$ \$	O \$0	\$0 \$0 \$0	\$1,400,070 \$0 \$0
Subtotal Estimate Escalation Contingency						\$0 \$0	\$0 \$0	\$ \$		\$0 \$0	\$1,400,070 \$187,049 \$778.071
Total 4.2.16.03 MONITORIN	GAND CONTROLS			0		\$0	\$0	\$	\$2,365,190	\$0	\$2,365,190
4.2.16.04 CRITICALITY & RAD	MONITORING SYSTEMS INSTALLATION	<u> </u>									
CRITICALITY SYSTEM IN Memo: Based on the GEM proj	U.C. per E./ NSTALLATION ect installationcosts for criticality equipm	3.00	EA	0		° \$0	o \$0	\$	20185 0 \$60,555	o \$0	20185 \$60,555

Project Name: **OU** 7-70 **Staged Interim Action**

Stage III Project - Retrieval System Project - Option 2

Project Location: INEEL-RWMC
Estimate Number: 5974-2 Option 2-R

Client: S. L. Austad

Prepared By: S.N. Wasley/R.D.Adams

Estimate Type: **Project Support**

	Qtv	UOM_ H	lrs_	Resource	<u>Labor</u>	Equipment	<u>Material</u>	Subcontractor	Other	TOTAL
4.2.16.04 CRITICALITY & RAD MONITORING SYSTEMS IN	STALLATION									
RADIOLOGICAL MONITORING EQUIPMENT INSTAL	U.C. per LS LLATION 1.00	LS	0		o \$0	° \$0	\$6	0 16349 0 \$16,349	o \$0	16349 \$16,349
Subtotal					\$0	\$0	\$0	0 \$76,904	\$0	\$76,904
Sales Tax INEEUSubcontractorOverheads	0.00%				\$0 \$0	\$0 \$0	\$(\$	'	\$0 \$0	\$0 \$0
Subtotal Estimate Escalation Contingency					\$0 \$0	\$0 \$0	\$6		\$0 \$0	\$76,904 \$10,274 \$42,738
Total 4.2.16.04 CRITICALITY & RAD MONITORING SYS INSTALLATION	TEMS	0)		\$0	\$0	\$0	0 \$129,917	\$0	\$129,917
4.2.16.05 CCTV MONITORING SYSTEM										
Memo: Costs are based on the GEM project calculate	ted square footage.									
Memo: Costs are based on the GEM project calculate					o	o		0 1.36	a	\$215. 1 /5 2 /6
Memo: Costs are based on the GEM project calcular CCTV MONITORING SYSTEM-INSTALLATION LABO Memo: Unit costs are based on the GEM project. Camera ec	<i>U.C. per SF</i> DR 158,200.00		0 nent WB\$	S.	o \$0	<i>o</i> \$0	ş	0 1.36 0 \$215,152	<i>o</i> \$0	\$215, 1/526
CCTV MONITORING SYSTEM-INSTALLATION LABO Memo: Unit costs are based on the GEM project. Camera ec	<i>U.C. per SF</i> DR 158,200.00		0 nent WB\$	S.	\$0	\$0	\$(0 \$215,152	\$0	
CCTV MONITORING SYSTEM-INSTALLATIONLABO Memo: Unit costs are based on the GEM project. Camera ec Subtotal Sales Tax	U.C. per SF DR 158,200.00 quipment costs are included		0 nent WB\$	S.	\$0 \$0 \$0	\$0 \$0 \$0	\$6 \$0 \$0	\$215,152 0 \$215,152 0 \$0	\$0 \$0 \$0	\$215,152 \$0
CCTV MONITORING SYSTEM-INSTALLATION LABO Memo: Unit costs are based on the GEM project. Camera ec Subtotal Sales Tax INEEUSubcontractor Overheads Subtotal Estimate	<i>U.C. per SF</i> DR 158,200.00		0 nent WB\$	S.	\$0 \$0 \$0 \$0	\$0 \$0 \$0 \$0	\$0 \$0 \$0	\$215,152 0 \$215,152 0 \$0 0 \$0	\$0 \$0 \$0 \$0	\$215,152 \$0 \$0 \$215,152
CCTV MONITORING SYSTEM-INSTALLATION LABO Memo: Unit costs are based on the GEM project. Camera ec Subtotal Sales Tax INEEUSubcontractor Overheads	U.C. per SF DR 158,200.00 quipment costs are included		0 nent WBS	S.	\$0 \$0 \$0	\$0 \$0 \$0	\$6 \$0 \$0	\$215,152 \$215,152 \$0 \$0 \$0 \$0 \$0 \$28,744	\$0 \$0 \$0	\$215,152 \$0 \$0

4.2.16.06 INTEGRATIONCONTROLS SYSTEM

Memo: Costs are based on input from the Human/Intelligent systems group based on a similar system used for the 3100 cubic meter project. These costs were developed by identifying work scope tasks and required equipment. Included in the estimate back-up file are the developed spreadsheets identifying these task infull detail.

BBWI-A U.C. per LS 368270.67 E07 4980 \$73.95 0 368270.67 ELECTRONIC ENGINEERING 1.00 LS 4,980 E07 \$368,271 \$0 \$0 \$0 \$0 \$368,271

INEEL

Project Name: OU 7-10Staged Interim Action
Stage III Project - Retrieval System Project - Option 2
Project Location: INEEL-RWMC
Estimate Number: 5974-2 Option 2-R

Client:

S. L. Austad

Prepared By: S.N. Wasley/R.D.Adams

Coc	le Description	Contractor		Qtv	<u>UOM</u>	<u>Hrs</u>	Resource	<u>Labor</u>	<u>Ecluipment</u>	<u>Material</u>	Subcontractor	<u>Other</u>	TOTAL
4.2.16	3.06 INTEGRATIONCONTE	ROLS SYSTEM											
Mem		on input from theHuman/In d equipment. Included in								ese costs were	developed by identifyi	ing work scope	
EI1	MECHANICALENGINEER	BBWI-A RING	U.C. per LS	1.00	LS	3600 3,600	\$ 81.44 E I I	293 198.92 \$293,199	0 <i>\$</i> 0	\$	0 0 0 \$0	0 \$0	293198.92 \$293,199
E59	DESIGNER, MECHANICA	BBWI-A AL	U.C. per LS	1.00	LS	3360 3,360	\$62.95 E59	21 1517.89 \$211,518	o <i>\$0</i>		o o	o \$0	21 1517.89 \$211,518
E07	ELECTRONIC ENGINEER	BBWI-A RING	U.C. per LS	1.00	LS	1 900 1,900	\$73.95 E07	140504.87 \$140.505	o <i>\$0</i>	ş	o o o \$0	0 \$0	140504.87 \$140,505
EI7	QUALITY ENGINEERING	BBWI-A	U.C. per LS	1.00	LS	415 415	\$74.43 E17	30887.77 \$30,888	o \$0	\$	o o o \$0	o \$0	30887.77 \$30,888
E19	SAFETY ENGINEERING	BBWI-A	U.C. per LS	1.00	LS	415 415	\$76.85 E19	31894.31 \$31,894	o \$0	ş	0 0 0 \$0	0 \$0	31894.31 \$31,894
E28	PROJ MGMNT - ENGINEE	BBWI-A ERING/SCIENTIFIC	U.C. per LS	1.00	LS	2076 2,076	\$96.71 E28	200769.2 1 \$200,769	o \$0	ş	o o o \$0	<i>0</i> \$0	200769.21 \$200.769
E24	SYSTEMS ENGINEERING	BBWI-A	U.C.per IS	1.00	LS	585 585	\$85.52 E24	50026.67 \$50,027	o \$0	Ş	o o 0 \$0	0 \$0	50026.67 \$50,027
204	MANAGER, SCI/ENG FUN	BBWI-A NCTION	U.C. per LS	1.00	LS	415 415	\$124.64 204	51724.1 \$51,724	0 <i>\$0</i>	\$	0 0 0 \$0	0 \$0	5 1724.1 \$51,724

Project Name: OU 7-10 Staged Interim Action
Stage III Project - Retrieval System Project - Option 2
Project Location: INEEL-RWMC

Estimate Number: 5974-2 Option 2-R

S. L. Austad Client:

Code Description	Contractor	_	Qtv	<u>UOM</u>	<u>Hrs</u>	Resource	<u>Labor</u>	<u>Eauipment</u>	<u>Materia</u> l	Subcontractor	<u>Other</u>	TOT-L
4.2.16.06INTEGRATIONCONTRO	OLS SYSTEM											
	input from the Hum a n/ equipment. Included in								ese costs were	developed by identit	ying work scope	
MATERIALS		U.C. per LS	1.00	LS	0		*0 \$0	<i>0</i> \$0	170000 \$1,700,0		° \$0	1700000 \$1,700,000
Subtotal Sales Tax INEEL/Subcontractor Overheads	8	4.94%					\$1,378,794 \$0 \$1 57,183	\$0 \$0 \$0	\$1,700,0 \$102,0 \$	00 \$0	\$0 \$0 \$0	\$3,078,794 \$102,000 \$157,183
Subtotal Estimate Escalation Contingency							\$205,207 \$853,599	\$0 \$0	\$240,7 [,] \$1,001,43		\$0 \$0	\$3,337,977 \$445,954 \$1,855,037
Total 4.2.16.06 INTEGRATION	CONTROLSSYSTEM			17	7,746		\$2,594,783	\$0	\$3,044,1	85 \$0	\$0	\$5,638,968
OPC3100 TESTING AND TURNON Memo: Percentage allowan TESTING &TURNOVER PL	ces derived by the proj	U.C. per\$	CSIX/TRU 117,741.00		ibilityStua 0	ly, produced by	Washington 0 0 \$0	Group International 0 \$0		0 0	0.002 \$193,635	<i>0.002</i> \$193,635
Subtotal Sales Tax							\$0 \$0	\$0 \$0	\$ \$		\$193,635 \$0	\$193,635 \$0
INEEUSubcontractor Overheads	i	0.00%					\$0 \$0	\$0	\$		\$0 \$0	\$0 \$0
Subtotal Estimate Escalation Contingency							\$0 \$0	\$0 \$0	\$ \$		\$31,137 \$160,273	\$193,635 \$31,137 \$160,273
Total OPC3100 TESTING AND	TURNOVER PLANNING	3			0		\$0	\$0	\$	\$0	\$385,045	\$385,045
OPC3200 S. O. TESTING Memo: Percentage allowan S. O. TESTING	ces derived by fh e proje	U.C.per\$	<i>CSIX/TRU</i> 317,741.00		ibility Stud	y, produced by	Washington 0 0 \$0	Group International 0 \$0		0 0	0.03 \$2,904,532	0.03 \$2,904,532
0. 0. 1201		30,0		• •	U		ΨΟ	ΨΟ	φ	Ψ.	72,501,552	W2,501,552

Project Name:

OU 7-10 Staged Interim Action
Stage III Project - Retrieval System Project - Option 2

Project Location: INEEL-RWMC
Estimate Number: 5974-2 Option 2-R

S. L. Austad Client:

Code Description Cont	ractor Qtv	UOM	Hrs	Resource	Labor	Equipment	Material	Subcontractor	<u>Other</u>	TOTAL
PC3200 S. O.TESTING										
Memo: Percentageallowances de	rived by the project team on the CSIX/TR	U Grout Fea	asibilityStud	dy, produced by	Washington	Group Internationa	l, December, 20	00.		
Subtotal					\$0	\$0	\$0	\$0	\$2,904,532	\$2,904,53
Sales Tax	0.000/				\$0 \$0	\$0 **	\$0		\$0	\$0
INEEUSubcontractor Overheads	0.00%				20	\$0	\$0	\$0	\$0	\$
Subtotal Estimate Escalation					\$0	\$0	\$0	\$0	\$467,049	\$2,904,53 \$467,04
Contingency					\$0	\$0	\$0		\$2,404,096	\$2,404,09
Total OPC3200 S. O. TESTING			0		\$0	\$0	\$0	\$0	\$5,775,677	\$ 5, 77 5, 6 77
OPC3300 ORR SUPPORT										
Memo: Percentage allowances de	rived by the project team on the CSiX/TR	U Grout Fea	asibility Stud	dy, produced by	Washington	Group Internationa	I, December, 20	00.		
	U.C. per\$				0	0	0	0	0.002	0.00
ORR SUPPORT	96,817,741.00	\$	0		\$0	\$0	\$0	\$0	\$212,999	\$212,999
Subtotal					\$0	\$0	\$0	\$0	\$212,999	\$212,999
Sales Tax	0.000/				\$0	\$0	\$0	·	\$ <i>0</i>	\$0
INEEUSubcontractorOverheads	0.00%				\$0	\$0	\$0	\$0	\$0	\$0
Subtotal Estimate Escalation					\$0	\$0	\$0	\$0	\$34,250	\$212,999 \$34,250
Continoency					\$0	\$0	\$0	\$0	\$176,300	\$176,300
Total OPC3300 ORR SUPPORT			0		\$0	\$0	\$0	\$0	\$423,550	5423,550
OPC3400 FACILITY ACCEPTANCE REVI	<u>EW</u>									
Memo: Percentageallowances de	rived by the project team on the CSiX/TR	U Grout Fea	sibilityStud	ly, produced by	Washington	Group Internationa	I, December, 200	00.		
FACILITY ACCEPTANCE REVIEW	U.C. per\$. •	•		0	0	o \$0	0	0.001	0.001 \$145,227
FACILITY ACCEPTANCE REVIEW	96,817,741.00	, φ	0		\$0	\$0	\$0	\$0	\$145,227	\$145,2

Project Name: OU 7-70 Staged Interim Action
Stage III Project - Retrieval System Project - Option 2
Project Location: INEEL-RWMC
Estimate Number: 5974-2 Option 2-R

Client:

S. L. Austad

Code Description Contractor	_Qtv_	UOM	Hrs	Resource	<u>Labor</u>	<u>Equipment</u>	<u>Material</u>	Subcontractor	<u>Other</u>	TOTAL
OPC3400 FACILITY ACCEPTANCE REVIEW										
Memo: Percentageallowances derived by the proj	ect team on the CSIX/TRL	J Grout Feas	sibility Stud	ly, produced by	Washington	Group Internationa	al, December, 2	000.		
Subtotal Sales Tax INEEL/Subcontractor Overheads	0.00%				\$0 \$0 \$0	\$0 \$0 \$0	\$0 \$0 \$0	\$0	\$145,227 \$0 <i>\$0</i>	\$145,227 \$0 <i>\$</i> 0
Subtotal Estimate Escalation Contingency					\$0 \$0	\$0 \$0	\$0 \$0		\$23,352 \$120,205	\$145,227 \$23,352 \$120,205
—Total OPC3400 FACILITY ACCEPTANCE REVIEW			0		\$0	\$0	\$0	\$0	\$288,784	\$288,784
OPC3500 RADIOLOGICAL CONTROL SUPPORT Memo: Percentageallowances derived by the projection of the proj	ect team on the CSIX/TRU U.C. per\$ 96,817,741.00		ibility Stud	ly, produced by	Washington 0 \$0	Group Internationa 0 \$0	ıl, December, 20 (\$0	0	0.001 \$106,500	<i>0.00</i> 1 \$106,500
Subtotal Sales Tax INEEL/Subcontractor Overheads	0.00%	_			\$0 \$0 \$0	\$0 \$0 \$0	\$0 \$0 <i>\$</i> 0	\$0	\$106,500 \$0 \$0	\$106,500 \$0 \$0
Subtotal Estimate Escalation contingency					\$0 \$0	\$0 \$0	\$0 \$0		\$17,125 \$88,150	\$106,500 \$17,125 \$88,150
—Total OPC3500 RADIOLOGICAL CONTROL SUPPORT	Г		0		\$0	\$0	\$0	\$0	\$211,775	\$211,775
OPC3600 OPERATOR TRAINING Memo: Percentageallowances derived by the projections of the projection of	ect team on the CSiX/TRU	Grout Feas	ibility Stua	ly, produced by	Washington	Group Internationa	I, December,20	900.		
OPERATOR TRAINING	<i>U.C. per</i> \$ 96,817,741.00	\$	0		0 \$0	° \$0	\$0		0.02 \$1,936,355	0.02 \$1,936,355

Project Name: OU 7-70 Staged Interim Action
Stage III Project - Retrieval System Project - Option 2
Project Location: INEEL-RWMC
Estimate Number: 5974-2 Option 2-R

Client: S. L. Austad

Code Description Contractor	_Qtv	UOM H	rs Resource	<u> Labor</u>	<u>Eauipment</u>	<u>Material</u> Su	<u>bcontractor</u>	<u>Other</u>	TOTAL
PC3600 OPERATOR TRAINING									
Memo: Percentage allowances derived by the	oroject team on theCSIX/TRU G	rout Feasibllity	Study, produced l	by Washington	Group Internationa	I, December, 2000.			
Subtotal Sales Tax INEEL/Subcontractor Overheads	0.00%			\$0 \$0 \$0	\$0 \$0 \$0	\$0 \$0 \$0	\$0 \$0 <i>\$0</i>	\$1,936,355 \$0 <i>\$0</i>	\$1,936,35 \$ \$
Subtotal Estimate Escalation Contingency				\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$311,366 \$1,602,731	\$1,936,355 \$311,36 \$1,602,73
Total OPC3600 OPERATOR TRAINING		0		\$0	\$0	\$0	\$0	\$3,850,451	\$3,850,451
OPC3700 OPERATING PROCEDURES Memo: Percentage allowances derived by the population of the population	oroject team on the CS/X/TRU G U.C. per \$ 96,817,741 .00 \$	·	Study, produced b	oy Washington 0 \$0	Group Internationa 0 \$0	I, December, 2000. 0 \$0	o \$0	0.004 \$425,998	0.00 \$425,99
Subtotal Sales Tax INEEUSubcontractor Overheads	0.00%			\$0 \$0 \$0	\$0 \$0 \$0	\$0 \$0 <i>\$0</i>	\$0 \$0 \$0	\$425,998 \$0 \$0	\$425,998 \$0 \$0
Subtotal Estimate Escalation Contingency				\$0 \$0	\$0 \$0	\$0 \$0	\$0 \$0	\$68,500 \$352.601	\$425,998 \$68,500 \$352.601
Total OPC3700 OPERATING PROCEDURES		0		\$0	\$0	\$0	\$0	\$847,099	\$847,099
OPC3800 START-UP COORDINATION									
Memo: Percentage allowances derived by the p	roject team on the CSiX/TRU G	rout Feasibility	Study, produced b	y Washington	Group Internationa	I,December,2000.			
STARTUP COORDINATION	<i>U.C.</i> per \$ 96,817,741.00 \$		0	0 \$0	0 \$0	o \$0	<i>o</i> \$0	0.00 1 \$125,863	0.001 \$125,863

OU 7-10 Staged Interim Action Project Name:

Stage III Project - Retrieval System Project - Option 2

Project Location: INEEL-RWMC Estimate Number: 5974-2 Option 2-R

S. L. Austad Client:

Prepared By: S.N. Wasley/R.D.Adams

Estimate Type: **Project** Support

Code Description	<u>Contracto</u> r	Qtv	UOM_	Hrs Resource	e <u>Labor</u>	Eauipment	Material Su	bcontractor	Other	TOTAL
OPC3800 START-UP COORDINATI	<u>ON</u>									
Memo: Percentage allowance	es derived by the project teal	m on the CSiX/TRU	Grout Feas	ibility Study, produced	by Washington	Group Internation	al, December, 2000.			
Subtotal					\$0	\$0	\$0	\$0	\$125,863	\$1 25.863
Sales Tax					\$0	\$0	\$0	\$0	\$0	\$0
INEEUSubcontractorOverheads	0.00	%			\$0	\$0	\$0	\$0	\$0	\$0
Subtotal Estimate										\$125,863
Escalation					\$0	\$0	\$0	\$0	\$20,239	\$20,239
Contingency					\$0	\$0	\$0	\$0	\$104,177	\$1 04,177
—Total OPC3800 START-UP COO	RDINATION			0	\$0	\$0	\$0	\$0	\$250,279	\$250,279

OPC3900 SPARES

In support of start-up and testing only. Percentage allowances derived by the project team on the CSiX/TRU Grout Feasibility Study, produced by Washington Group International, December, Memo: 2000.

SPARES	<i>U.C. per LS</i> 9,595,247.00 LS	0	o \$0	0 \$0	0.06 \$575,715	o \$0	o \$0	0.06 \$575,715
Memo: Calculated at 6% of procurement costs	less RCS and fabric structures procurement costs.		, ,	, -	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			. ,
Subtotal			\$0	\$0	\$575,715	\$0	\$0	\$575.715
Sales Tax			\$0	\$0	\$34,543	\$0	\$ 0	\$34,543
INEEUSubcontractorOverheads	0.00%		\$0	\$0	\$0	\$0	\$0	\$0
Subtotal Estimate								\$610,258
Escalation			\$0	\$0	\$98,129	\$0	\$0	\$98.129
Contingency			\$0	\$0	\$505,113	\$0	\$0	\$505,113
-Total OPC3900 SPARES		0	\$0	\$0	\$1,213,501	\$0	\$0	\$1,213,501

7.0 PROJECT MANAGEMENT

Memo:

Percentage of construction and procurement costs based on detailed input from the project team for the LCB effort, OU 7-10 PIT-9 STAGE 111- LCB, estimate # 5974-1. Also considered were percentage allowances derived by the project team on the CSIX/TRU Grout Feasibility Study, produced by Washington Group International, December, 2000. Where large discrepencies occurred, an average of the two percentages was applied here.

	U.C. per\$		0	0	0	0	0.09	0.09
PROJECT MANAGEMENT SUPPORT	96,817,74100 \$	0	\$0	\$0	\$0	\$0	\$8,713,597	\$8,713,597

72

Material Costs where applicable include Idaho State Sales Tax

Project Name: OU 7-70 Staged Interim Action
Stage III Project - Retrieval System Project - Option 2
Project Location: /NEEL-RWMC
Estimate Number: 5974-2 Option 2-R

Client: S. L. Austad

	<u>escriDtion</u>	<u>Contractor</u>	<u>Qtv</u>	<u>UOM</u>	<u>Hrs</u>	<u>Resource</u>	<u>Labor</u>	<u>Eauipment</u>	<u>Material</u>	Subcontractor	<u>Other</u>	<u>TOTAL</u>
7.0 PROJE	CT MANAGEMENT											
Мето:	percentage allow		nt costs based on detailed act team on the C\$iX/TRU as was applied here.									re
Subtotal							\$0	\$0	\$0	\$0	\$8,713,597	\$8,713,597
Sales Ta	:=	J _	0.000/				\$ 0	\$0	\$0	\$0	\$0	\$0
INEEUSU	bcontractorOverhea	as .	0.00%				\$0	\$0	\$0	\$0	\$0	\$0
Subtotal Escalatio	Estimate n						\$0	\$0	\$0	\$0	\$932,355	\$8,713,597 \$932,355
Continge							\$0	\$0	\$0	\$0	\$4,129,686	\$4,129,686
Total 7.0	PROJECT MANAG	EMENT			0		\$0	\$0	\$0	\$0	\$13,775,637	\$13,775,637
Subtota		AGE III - RETRIEVAL	SYSTEM PROJECT	- OPTIO	N #	\$	13,108,384	\$3,143,269	\$42,975,467		\$50,935,125	\$*************************************
Sales T	ax 2		SYSTEM PROJECT	- OPTIO	N #		13,108,384 \$0 \$4,429,368	\$3,143,269 \$0 \$1,020,812	\$42,975,467 \$2,578,528 \$2,744,774	\$36,719,872 \$0 \$1,070,169	\$50,935,125 \$0 \$0	\$**,***,*** \$2,578,528 \$9,265,123
Sales T			SYSTEM PROJECT	- OPTIO	N #		\$0	\$0	\$2,578,528	\$0	\$0	\$2,578,528
Sales T	ax 2 Subcontractor Ov Il Estimate ion		SYSTEM PROJECT	- OPTIO	N #	:	\$0	\$0	\$2,578,528	\$0 \$1,070,169 \$4,167,902	\$0	\$2,578,528